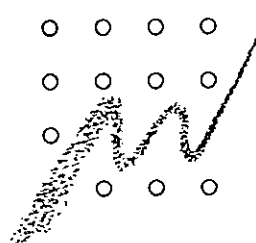




09002437



*Applied  
Signal  
Technology, Inc.*

ANNUAL REPORT

**2008**

www.appsig.com

Intelligence | Surveillance | Reconnaissance

Received SEC

JAN 13 2009

Washington, DC 20549

PROCESSED

MAR 09 2009

THOMSON RESEARCH

# Letter to Shareholders

Dear Shareholders,

I am honored to be writing to you this year as your new Chief Executive Officer. In the future, when we look back at fiscal 2008, I believe it will come to be regarded as a pivotal year in our company's proud history as we set the foundation for future growth. Our financial results for the year were strong. Revenues rose 9.4% to a record level of \$186.3 million and earnings per share increased by 14.5% to \$0.63 per share. More important than the results, however, is the shift in direction that we have undertaken. Building upon the strong strategic and financial position that Gary Yancey and our other founders established for this company, we embarked on an intensive process to streamline our operations and reduce costs to further enhance our competitiveness. We have a tremendous opportunity to build on our legacy and to reinforce our position as a leader in a highly specialized business.

***This year marks our company's 25<sup>th</sup> anniversary.*** Applied Signal Technology, Inc. opened for business in 1984 at the end of Ronald Reagan's first term in office. "Star Wars" was the big public defense-oriented initiative, but quietly, there was a serious investment in stealth and national technical information collection. It was also a time of significant technology change. Our founders had the vision to harness the dawn of digital signal processing to revolutionize signals intelligence (SIGINT). Over the last twenty-five years, communications and signals intelligence has become exponentially more complicated and challenging, and Applied Signal Technology is still on the cutting edge. We are deploying and developing new technologies across the intelligence, surveillance and reconnaissance (ISR) spectrum that serve an increasingly diversified range of needs and a broadening array of customers.

***Our strategy has three major areas of focus.*** The first is to solidify our leadership position in our core competencies of signal processing, signal analysis, and low-power electronics. Our innovation heritage is strong. We were the first to deploy blind equalization for radio transmission systems, software-defined radios for cellular intercept, bandwidth compression on satellite communication networks, and deep packet inspection for network monitoring. Going forward, we are also implementing our innovation as software products and increasing our capability in related system integration and sustainment. We have begun to make inroads in all of these areas, but we must continue to develop these capabilities. In our core markets, there are emerging trends that will lead to opportunity. Among them is the need for a recapitalization of existing SIGINT equipment, particularly for tactical applications. Our Raider product addresses this need with both collection and analysis tools for 3G wireless communications. Another promising program is Gecko, a broadband communications monitoring package, which we believe has significant opportunity in various programs associated with the Cyber-Security initiative.



“As we complete our 25<sup>th</sup> year in business, our company is stronger than ever. Our success is a testament to our talented employees and their dedication to solving our customers' most difficult problems.”

**William B. Van Vleet III**  
Chief Executive Officer

**Our second area of focus** is to improve our competitiveness by lowering our cost structure and implementing a new multi-rate strategy to expand our business opportunities. Applied Signal Technology has been primarily organized to operate in very complicated, engineering intensive programs. We have built an outstanding team of scientists and engineers to execute some of the most challenging programs in the industry.

When technical difficulty and specialized solutions drive the customer's need, our superior technology often provides the basis for sole-source awards. That having been said, there is a significant amount of business where our competitive advantage needs to be more focused on cost. We recognize this and are working hard to better position our infrastructure and capabilities for this class of programs. This year, we intend to leverage our research and development efforts across multiple programs and we will incorporate our software into industry-leading commercial off-the-shelf solutions to create efficiency where possible and appropriate. While we intend to remain one of the best and most capable suppliers in this market, we believe we can retain our technological competitive advantage and give the customer a better price-value proposition to expand our business opportunities.

**Our third strategic initiative** is to expand the business in our core market. We intend to expand our leadership in ISR and enhance our position through participation in new programs with new customers and complementary technologies to broaden our offerings. We are very pleased with the progress we are making in sensor technology. After a decade of research and development, we are deploying synthetic aperture sonar products that are ground breaking for both commercial survey applications and for naval warfare applications. We are also developing and deploying a range of sensor technology for the detection of explosives, radiological material, and narcotics that have wide homeland security applications. Our expansion efforts are also not only product focused, but also focused on our customers. Historically, about 80% of our revenues come from the intelligence community. We believe that the growth in tactical SIGINT applications will help us increase our business in the defense marketplace. We have been able to achieve unprecedented size, weight and power improvements so that

our hardware can be deployed on the battlefield, in vehicle-transportable and man-transportable products. In particular, we are very pleased with Pegasus, a robust ELINT package for manned and UAV platform deployment. Finally, we are diversifying within our current programs to extend our product offerings into systems integration and sustainment solutions.

It's important to recognize that we can accomplish these goals with our existing resources and infrastructure. We also have a very strong financial position. Our past conservative posture with regard to our balance sheet has provided a strong foundation. As a result, at the end of fiscal 2008, we had a cash and securities balance that exceeded \$59 million. We are also fortunate to have the intrinsic value of this business well recognized by our shareholders. While we are a business that is driven by the needs of our customers and our nation, we are also a business that includes driving shareholder value as a core objective. We are very pleased, particularly in the current market environment, that we have been able to pay a dividend to our shareholders. We are also making it a priority to improve upon our asset-based return levels and will continue to look for opportunities for strategic capital deployment.

I consider Applied Signal Technology to be a special company in an important industry. Our greatest asset is our talented and dedicated employees and I am excited to demonstrate what this team can accomplish. We are looking forward to the year ahead and are very grateful for the support shown to the company from our customers, our partners, and our shareholders. It is our intent to show you, over the course of the coming year, that we can both serve the important and urgent needs of the marketplace while expanding our business, improving our profitability, and enhancing value for our shareholders.

Sincerely,



**William B. Van Vleet III**  
Chief Executive Officer

**To support our nation's toughest missions, America relies on the innovation and expertise of a trusted national asset.**



At Applied Signal Technology, Inc. (AST), our solutions are aligned with our customers' highest priorities. We provide the intelligence, surveillance, and reconnaissance (ISR) capabilities America needs to prevail in the war against terrorism, to secure our homeland, and to anticipate and support emerging threats. This focus has made AST an exceptional national resource.

### **The AST Story**

In 1984, AST initiated business operations in Sunnyvale, California, with four founders and a vision of providing advanced digital signal processing technologies that protect and enhance national security. Today, we remain true to that vision. AST has grown into a full-service ISR provider, serving national priorities in defense, intelligence, and homeland security with over \$185 million in annual revenues. AST is committed to bringing cutting-edge science and engineering together for the protection of our country and delivering quality customer service and best value.

“Our technical insights and innovations have earned us our reputation as a national resource for global security. We provide value to our customers through superior products, strong partnerships, significant R&D investment, and excellent customer service. We are constantly pursuing new markets for our products, systems, and services.”

**Dr. John R. Treichler**  
Chief Technical Officer

## **Solutions We Provide**

Our sophisticated communications surveillance and remote sensing products, systems, and services help resolve our customers' most difficult national security and signal collection issues, both at home and abroad. We provide advanced ISR solutions that allow our nation to prepare for, prevent, determine, and respond to foreign and domestic threats. Our capabilities include:

- **Signals Intelligence (SIGINT):** We collect information and produce actionable intelligence through the detection, interception, and evaluation of signals, including communication signals (COMINT) and electromagnetic signals, such as radar, for electronic intelligence (ELINT).
- **Electronic Warfare (EW):** We detect, identify, and counter adversary weapons and sensor systems in the battlespace through the collection of electronic emitters. Our solutions include analyzing command and control signals associated with weapon systems, scanning their radar bands and identifying their type and precise location.
- **Broadband Network Communications:** We provide bandwidth compression technology to maximize performance for satellite communications and provide high-capacity communication network monitoring products to protect against the threat of cyber attacks.

- **Sensor Surveillance:** Our specialized sensors and signature processing observes changes in the environment to provide early warning of activities of concern to global security. It includes the use of acoustic sensors and signals to detect, identify, and counter surface and sub-surface threats including enemy submarines and mines. We also provide remote sensing by processing and analyzing information from sound and light spectrum sources, including radar, magnetic, hyperspectral, infrared, electro-optical, and visible light.
- **Mission Planning and Support:** We provide software-based management systems that provide the tasking and planning of deployed sensors and collection systems to conduct operations, training, and sustainment.
- **Professional Services:** We provide engineering expertise, material, and operational support to enable and sustain mission readiness, systems operation, and mission success.

## **Markets We Serve**

- Defense
- Intelligence
- Homeland Security

# Defense



**With the emergence of new technologies and their integration into the domains of land, air, and sea, it is vital that we invest significant resources into converting this technology into next-generation solutions for our nation's defense and intelligence communities to use in the detection, interception, and location of hostile forces.**

AST is a leading provider of advanced communications surveillance, electronic warfare, and sensor systems. We provide our customers with comprehensive solutions for searching, detecting, locating, and analyzing mobile communication signals and weapon systems around the world.

The AST product portfolio includes man-portable, airborne, remote/unattended, and system-level solutions for both strategic and tactical missions. Our systems are true wideband digital systems utilizing the very latest signal processing technology to deliver superior performance against conventional and modern signals, even in the most challenging signal environments.

## **Tactical Solutions for Precision Target Location and Tracking**

With the ever growing need to gain access to critical information and target location, finding a target in today's mobile environment can prove to be a challenging task. AST's ground-based tactical SIGINT products provide capabilities that are small, low-powered, and highly mobile.

We have pioneered the use of wideband digital intermediate frequencies (IF) and software-defined radio architectures that provide communication intelligence coupled with geolocation information. Capitalizing on the ability to process evolving signal formats, AST has helped narrow the information gap in tactical situations where our systems can target a wide range of modern communication systems.

#### Advanced Aerial Surveillance

AST has unique COMINT solutions for both manned and unmanned airborne platforms. Based on software-defined radio architectures, our solutions are reconfigurable in flight and intended for today's complex signal environments.

Our aerial collection systems are state-of-the-art, and they utilize spatial beam forming and coherent channel processing to identify and locate targets in a co-channel interference environment. They perform full-signal intelligence functionality, including surveying, base station mapping, general and directed searching, intercepting, copying, and geolocation.

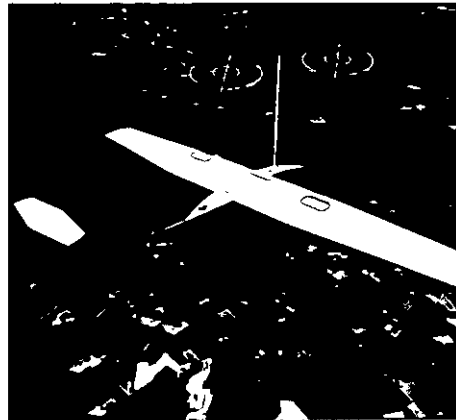


#### Passive Detection, Accurate Identification, and Precise Location

Electronic warfare is essential to maintaining America's military superiority.

Through significant investment in R&D, AST has developed next-generation electronic support measures (ESM) and electronic intelligence (ELINT) collection capabilities that are reduced in size, weight, and power.

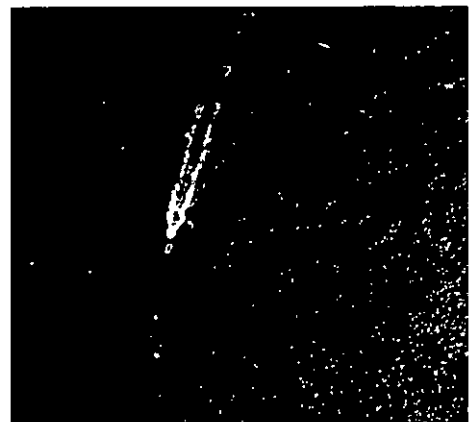
Operating across the electromagnetic spectrum, our ESM/ELINT products deliver identification and location information about the enemy's electronic emitters, under the most challenging conditions.



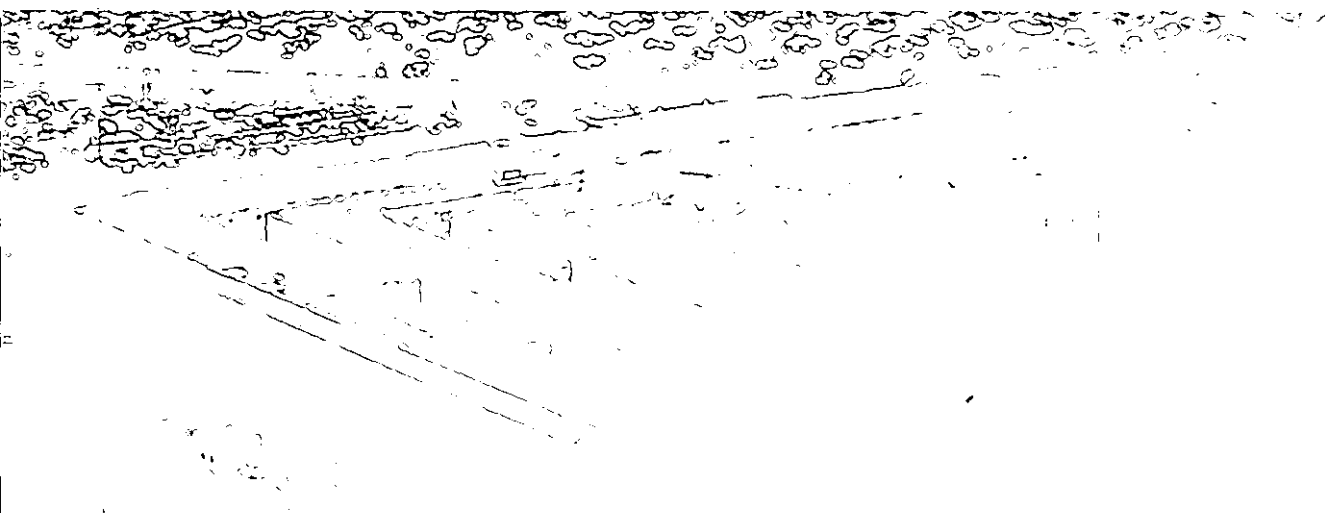
#### Deployable Anti-submarine Warfare (ASW) Systems

Quiet diesel-electric submarines are increasingly more difficult to detect by using traditional passive acoustic means. To guard against emerging threats around the world, U.S. strategy calls for forward-deployed, rapidly employable, and sustainable forces. The ability to safely transit to and operate in strategically important areas by sea is a key factor in this strategy.

The rapid development of modern conventional submarines using air independent propulsion and carrying sophisticated missile and torpedo systems increases an opponent's ability to deny access to and limit entry into the sea lanes of communication. AST has developed deployable ASW systems that use new methods in acoustic and non-acoustic signal processing to discover and expose these stealthy threats.



# Intelligence



**America's intelligence capabilities must be agile, effective, and secure. They must provide accurate, meaningful information to decision-makers in time to make a difference. We deliver the solutions that make it possible.**

Without question, the war against terrorism has presented the intelligence community with challenges unlike any before. They are required to supply timely, accurate intelligence about terrorist activities worldwide; share information securely among multiple agencies and foreign partners; and identify, develop, and deploy transformational technologies to exploit the growing volume of communication signals.

Meeting these challenges has made our communication surveillance and analysis solutions a strong and continuing growth area for AST. We specialize in the collection, processing, and interpretation of large volumes of complex signal data and transform that data into actionable intelligence.

## Advanced Intelligence Collection

A constantly changing signal environment brings increased security and intelligence challenges. AST provides the tools needed to help mitigate these challenges with our sophisticated receivers, tuners, demodulators, and signal analyzers. Our systems perform signal survey, intercept, identification, location, and analysis functions that improve mission productivity by automating common processing tasks and mission planning. They simultaneously perform complex processing on tens of thousands of signals and quickly categorize and select target signals by using visual, audible, and analytic tools.

With such a breadth of signals, our simple interfaces are vital to rapidly bringing systems online and to optimizing their operation, without burdening operators with signal-by-signal tasking.

## Exploiting Intelligence from All Sources

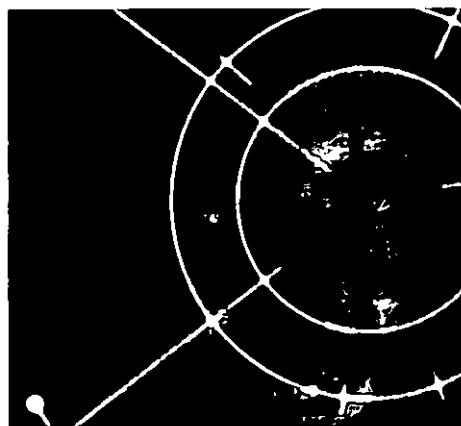
As the number of sensor sources increase, analysts quickly become overwhelmed with large volumes of data. AST offers new levels of effectiveness with its advanced information management and exploitation (IM&E) capabilities. Our IM&E tools improve situational awareness, data collection accuracy, and analyst productivity. The toolset fuses data from multiple and disparate sources into a single integrated picture and provides the ability to create and disseminate actionable intelligence faster and more effectively to national decision-makers, tactical commanders, and support personnel.



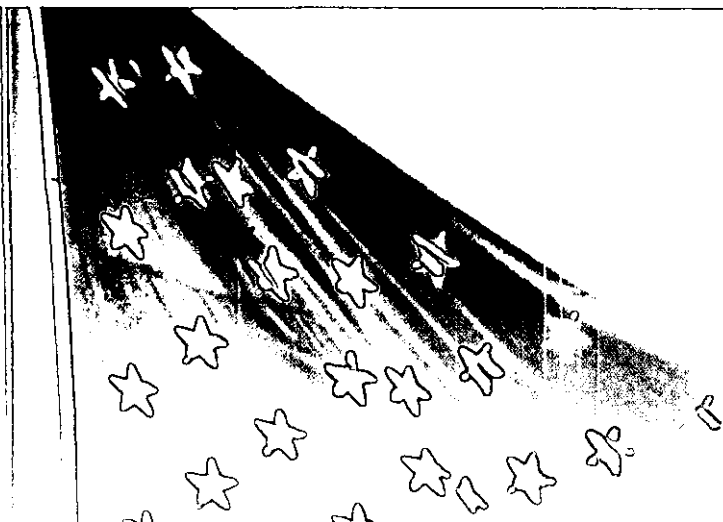
## Countering Cyber Espionage

Hostile cyber activity—whether perpetrated by insiders, terrorist organizations, or foreign governments—has increased in activity and sophistication, affecting not only our economy and public safety, but also our national security interests.

AST is helping to safeguard our country's critical infrastructure from cyber threats. Our sophisticated broadband communication systems can monitor an organization's networks on a global level and can quickly gather and process information, thereby ensuring a well-informed response to an attack. Our products not only protect us against cyber intruders, they also detect, monitor, and capture their activities.



# Homeland Security



**One of the ways to defend our nation from the unpredictable is to create technologies that can accurately sense the environment for threats and increase situational awareness.**

AST delivers advanced sensor and signal processing expertise and adaptive technologies to help customers sense the environment for threats and increase situational awareness.

We provide tools to sense and characterize the environment for radio frequency energy, underwater sound, light, heat, and complex phenomena to identify potential threats. For example, our sensors can detect chemicals used for explosives and man-made materials that might indicate the presence of improvised explosive devices (IEDs) as well as improve radar and sonar for the detection of small maritime targets, periscopes, and mines.

Our systems perform on land, at sea, and in the sky—this includes surface ships, submarines, towed and unmanned underwater vehicles, manned and unmanned aerial vehicles, and land-based platforms.

## Enhancing Maritime Surveillance

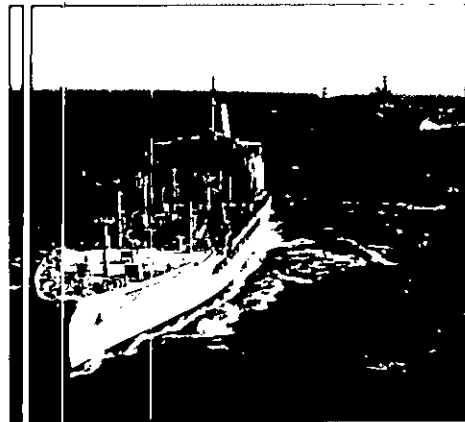
The maritime environment is vital to our way of life. In an era of terrorist threat, inserting maritime improvised explosive devices (MIEDs) into this environment represents a significant risk to the security, safety, economy, and ecology of our country. The key to managing this risk is consistent seafloor monitoring at an adequate resolution.

With resolutions that remain constant over wide ranges and water depths, our synthetic aperture sonar systems are the highest resolution harbor protection and port security products available on the market. Offering high resolution and large-area coverage, in both deep and shallow water, they integrate smoothly into the existing port and harbor surveillance systems.

### Protecting the Littoral Environment

AST is a leader in platform noise reduction and environmental clutter suppression in littoral environments. The radar experts at AST combine advanced space-time correlation algorithms with low size, weight, and power hardware to support complex maritime surveillance and tracking operations.

Our radar clutter reduction capability provides real-time realistic computer-generated images, and it quickly detects, tracks, and classifies low-visibility, slow moving targets (debris, ships, periscopes, etc.), even in the heaviest sea clutter.

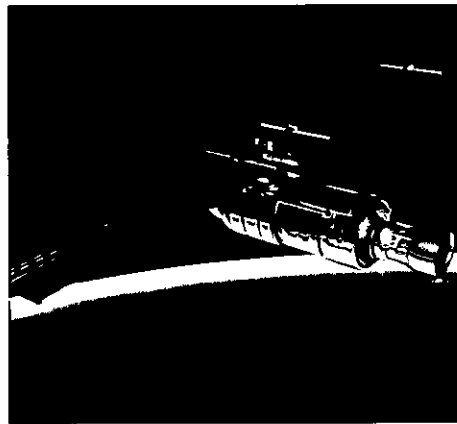


### Persistent Global Surveillance

Changes in the world security environment have led to a new focus on persistent wide-area surveillance.

Activities of interest include those of the military, weapons of mass destruction development, terrorist and insurgent maneuvers, and long-term strategic monitoring.

Legacy surveillance sensors, while powerful, are often limited because of fields-of-view that are difficult to access. AST is developing wide-area synthetic aperture radar (SAR) techniques to provide persistent, automated wide-area surveillance systems to tip off areas of threat activity and cue more localized high-resolution sensors for in-depth analysis.



### Securing Our Nation's Points-of-Entry

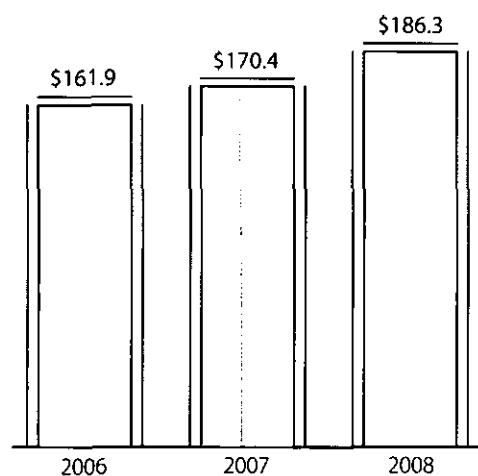
The first lines of domestic defense are the nation's points of entry. AST leverages emerging technologies and is developing minimally intrusive, highly accurate, and economical tools for locating and identifying explosives and chemical agents through thick barriers. Our point-of-entry solutions can be used to secure America's airports, seaports, borders, and critical infrastructures.



# Financial Highlights

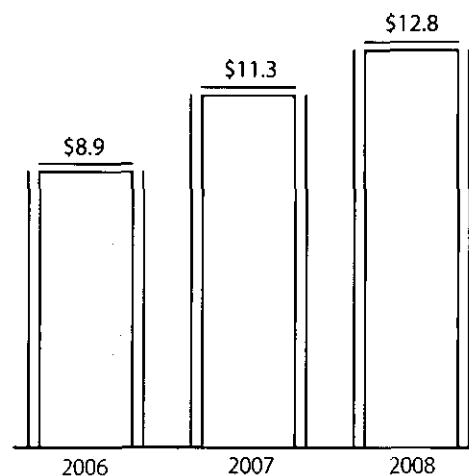
## Revenues

\$ in Millions

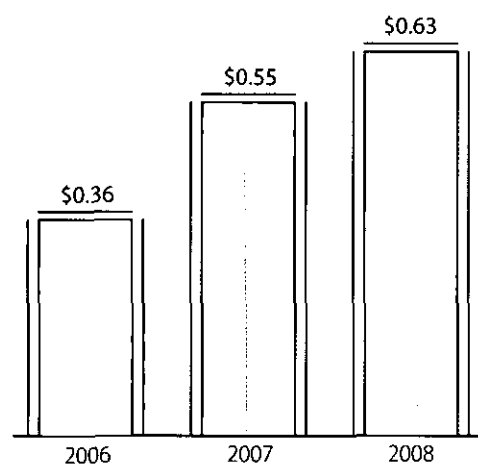


## Operating Income

\$ in Millions

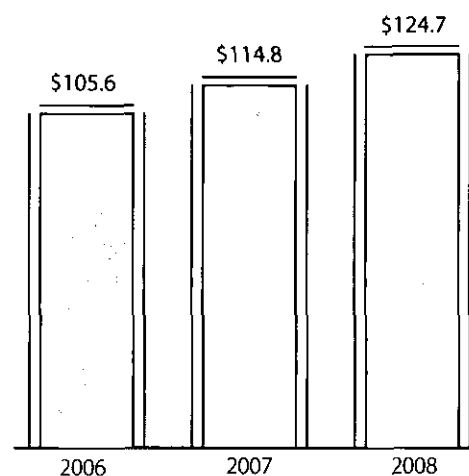


## Diluted Earnings per Share



## Shareholders' Equity

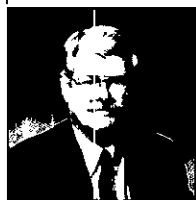
\$ in Millions



Our financial results for the year were strong. Revenues rose 9.4% to a record level of \$186.3 million and earnings per share increased by 14.5% to \$0.63 per share.

# Corporate Directory

## Board of Directors



John P. Devine,  
Chairman  
Retired Deputy Director  
Technology-NSA



William B. Van Vleet III,  
Director  
President and Chief  
Executive Officer



Dr. John R. Treichler,  
Director  
Chief Technical Officer,  
Founder



Milton E. Cooper,  
Director  
Former President, Federal Sector  
Computer Sciences Corporation



David D. Elliman,  
Director  
Principal of Elmrock, Inc.,  
an investment firm



Marie S. Minton, CPA, CFA,  
Director  
Managing Director,  
Transition Finance Strategies, LLC,  
an investment holding company



Robert J. Richardson,  
Director  
Former Chairman and Chief  
Executive Officer,  
Unitrode Corporation,  
a semiconductor company

## Officers



William B. Van Vleet III,  
President and Chief  
Executive Officer



Dr. John R. Treichler,  
Chief Technical Officer,  
Founder



James E. Doyle,  
Chief Financial Officer;  
Vice President, Finance



Dr. Michael J. Ready,  
Chief Marketing Officer



Renato F. Roscher, Jr.,  
Executive Vice President,  
Broadband Communication  
Systems Division



Dr. Joseph Leonelli,  
Vice President,  
Intelligence and Electronic  
Warfare Systems Division



Dr. John F. Pesaturo, Jr.,  
Vice President,  
Sensor Systems Division

## Transfer Agent and Registrar

BNY Mellon Shareowner Services  
480 Washington Boulevard  
Jersey City, NJ 07310-1900  
877-238-2943  
TDD: 800-231-5469  
Foreign TDD: 201-680-6610  
Foreign Holders: 201-680-6578  
[www.bnymellon.com/shareowner/isd](http://www.bnymellon.com/shareowner/isd)

## SEC Reporting

Shareholders may obtain, without charge,  
a copy of the Company's filing with the  
Securities and Exchange Commission  
upon written request to Investor Relations.

## Investor Relations

ICR  
James Palczynski 203-682-8229  
[james.palczynski@icrinc.com](mailto:james.palczynski@icrinc.com)

## Corporate Counsel

DLA Piper  
2000 University Avenue  
East Palo Alto, CA 94303-2248

## Independent Auditors

Ernst & Young LLP  
303 Almaden Boulevard  
San Jose, CA 95110

## Stock Listing

NASDAQ Global Market  
Symbol: APSG

## Annual Meeting

The annual meeting will be  
held at 4:00 p.m. on March 18,  
2009, at the Sheraton Hotel,  
1100 North Mathilda Avenue,  
Sunnyvale, CA 94089

**United States  
Securities and Exchange Commission  
Washington, D.C. 20549  
Form 10-K**

(Mark One)

☒ Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

**For the Fiscal Year Ended October 31, 2008**

or

☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Transition Period from \_\_\_\_\_ to \_\_\_\_\_.

Commission file number 0-21236

**Applied Signal Technology, Inc.**  
(Exact name of registrant as specified in its charter)

**California**  
(State or other jurisdiction of  
incorporation or organization)

**77-0015491**  
(I.R.S. Employer  
Identification No.)

**460 West California Ave., Sunnyvale, CA 94086**  
(Address of principal executive offices)

**(408) 749-1888**  
(Registrant's telephone number, including area code)

**SEC Mail Processing  
Section**

**JAN 13 2009**

**Washington, DC  
111**

Securities registered pursuant to Section 12(b) of the Act: Common Stock, without par value; Nasdaq Global Select Market.

Securities registered pursuant to Section 12(g) of the Act: none.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes \_\_\_\_\_ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes \_\_\_\_\_ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter periods that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No \_\_\_\_\_

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

✓
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

<b>Large accelerated filer</b>	<b>Accelerated filer</b>	<b>Non-accelerated filer</b>	<b>Smaller reporting company</b>
--------------------------------	--------------------------	------------------------------	----------------------------------

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Act).

Yes \_\_\_\_\_

No ☒ \_\_\_\_\_

Aggregate market value of the voting common stock held by non-affiliates of the registrant:

Common stock, without par value – \$167,943,317 as of May 2, 2008, based on the closing price on such date for the registrant's common stock reported by the NASDAQ Global Market System. For purposes of this disclosure, shares of common stock held by persons who held more than 5% of the outstanding shares of common stock and shares held by officers and directors of the registrant have been excluded in that such persons may be deemed affiliates. The determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of registrant's common stock outstanding:

Common stock, without par value – 12,822,323 shares as of October 31, 2008.

#### **Documents Incorporated by Reference**

The registrant has incorporated by reference into Part II, Item 5, and Part III of this Form 10-K portions of its proxy statement for the registrant's Annual Meeting of Shareholders to be held on March 18, 2009.

10-K 2008

10-K 2007

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## Item 1: Business

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This annual report on Form 10-K contains forward-looking statements made pursuant to the provisions of Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are based on management's current expectations and beliefs, including estimates and projections about our industry. Forward-looking statements may be identified by the use of terms such as "anticipates," "expects," "intends," "plans," "seeks," "estimates," "believes," and similar expressions, although some forward-looking statements are expressed differently. Statements concerning financial position, business strategy, and plans or objectives for future operations are forward-looking statements. These statements are not guarantees of future performance, are subject to certain risks, uncertainties, and assumptions that are difficult to predict, and may cause actual results to differ materially from management's current expectations. Such risks and uncertainties include those set forth under "Item 1A: Risk Factors" and "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations." The forward-looking statements in this report speak only as of the time they are made and do not necessarily reflect management's outlook at any other point in time. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events, or for any other reason. However, readers should carefully review the risk factors set forth in other reports or documents we file from time to time with the Securities and Exchange Commission (SEC) after the date of the annual report. These SEC filings, as well as our latest annual report, can be obtained through our website at [www.appsig.com](http://www.appsig.com). In addition, hard copies can be obtained free of charge through our investor relations department.

### Description of the Business

Applied Signal Technology, Inc. (AST) is a leading provider of advanced intelligence, surveillance, and reconnaissance (ISR) solutions to enhance global security. We provide domain knowledge in the areas of signals intelligence (SIGINT) and sensor signature processing. Our SIGINT competencies include communications intelligence (COMINT) focusing on broadband and tactical wireless networks, and electronic intelligence (ELINT). Our sensor signature expertise includes processing information from electro-optic, sonar, radar, magnetic, and chemical sensors to detect changes in the environment and provide real-time alerts of potential threats. We specialize in the collection, processing, and understanding of signals for ISR missions with low size, weight, and power configurations to enable increased deployment on unmanned platforms. We develop and manufacture sophisticated sensors and digital signal processing equipment that use advanced software. Our primary customers are the United States Government and defense industry prime contractors for the United States Government.

Our sophisticated products, systems, and services help resolve our customers' most critical national security and signal collection issues. We provide advanced ISR solutions that allow our nation to prepare for, prevent, evaluate, and respond to foreign and domestic threats. Our specific capabilities include:

- **Tactical COMINT.** Our tactical COMINT solutions include deployment of ground-based and airborne payloads for the detection, identification, location, and tracking of mobile communications and weapon systems. The AST product portfolio includes man-portable, airborne, remote/unattended, and system-level solutions for both strategic and tactical missions. Our systems are wideband digital systems that utilize signal processing technology to deliver superior performance against conventional and modern signals, even in the most challenging signal environments.
- **Electronic Warfare (EW).** Our EW solutions detect, identify, and counter adversary weapon and sensor systems by collecting signals from electronic emitters. We have developed a suite of ELINT and electronic support measures (ESM) to derive intelligence from signals associated with weapons systems. This equipment is able to scan the radar bands associated with weapons systems and determine the type of system and its precise location for battlefield characterization and force protection. Our ELINT offering is new, and to date, we have derived a small amount of revenue from the sale of products.
- **Broadband Network Communications.** Our broadband communication network monitoring systems automatically scan and process tens of thousands of modern communications signals and produce actionable intelligence. These complex systems locate signals-of-interest and provide the analysis and visualization tools necessary to produce meaningful results in time to make a difference. We are developing a suite of high capacity network monitoring products to protect against the threat of cyber attacks. We also provide bandwidth compression technology to maximize performance for satellite communications.

- **Sensor Surveillance.** Our specialized sensors and signature processing observes changes in the environment that can provide an indication of activities of concern to global security. Sensor signatures addressed by AST include the use of sound, such as in sonar or radar, to detect mines or submarines; detection of chemicals to expose explosive devices; and detection of magnetic materials that might indicate the presence of buried mines or underground weapons facilities. Our sensor processing equipment provides automatic detection and classification of threatening objects in both marine and terrestrial environments.
- **Mission Planning and Support.** We provide software-based management systems that provide the tasking and planning of deployed sensors and collection systems to conduct operations, training, and sustainment. We also provide mission management of deployed systems.
- **Professional Services.** We perform high-end engineering services for government product development and operationally deployed systems. Examples of these services: evaluation of current performance, engineering improvements for performance enhancement, evaluation of signals being processed to develop system operation techniques that can improve the intelligence gathering, and customer training in the use of our standard products. Our services are typically offered on a time and materials basis. The prices of our services may vary based upon the skill level of technical talent required by our customers.

For fiscal year 2008, 65% of our revenues were from contracts for which we were the prime contractor, 69% of our revenues were from cost-reimbursable contracts, and 76% of our revenues were from sole-source contracts. Substantially all of our revenues are from contracts with the United States Government or prime contractors to the United States Government.

We are incorporated in California. Our headquarters are located at 460 West California Ave., Sunnyvale, CA, 94086, and our telephone number at that address is (408) 749-1888. Our website address is [www.appsig.com](http://www.appsig.com). The information posted on our website is not incorporated into this annual report. However, investors can obtain a copy of this annual report on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to such reports filed or furnished with the SEC, as well as a copy of our Code of Ethics, on our website free of charge. These filings are also available on the SEC's website at [www.sec.gov](http://www.sec.gov). The public may read and copy any materials we file with the SEC at the SEC Public Reference Room at 100 F Street, NE, Washington, D.C. The public may obtain information from the Public Reference Room by calling the SEC at 1-800-SEC-0330.

## Business Strategies

Our objective is to grow our business as a leading provider of state-of-the-art ISR products, systems, and services. To do so, we anticipate the needs of the global security marketplace and invest in research and development to introduce new capabilities. In some cases, our solution is to develop equipment or services that apply emerging technologies. In other cases, our solution is to develop equipment that offers smaller size, lower power consumption, and lower cost than competitor's products. Our strategy to accomplish these objectives focuses on three major elements: solidifying our leadership in signal processing, improving our competitiveness, and expanding the business in our core ISR market.

### *Solidify our leadership position in signal processing with established customers by:*

- **Expanding our core competency in signal processing.** Since inception, we have focused our attention on developing signal processing equipment and services. We believe that there have been, and will continue to be, opportunities to develop specialized signal processing equipment and services to satisfy emerging technological requirements. We work closely with industry computing technology leaders to develop custom and off-the-shelf solutions by using in-house software to create new products and systems to address emerging global security needs.
- **Anticipating marketplace needs.** We devote significant resources in order to anticipate future global security needs. We monitor technological and commercial advances in communications and sensors as well as trends in terrorist activities to identify potential solutions for our customers. We obtain information about marketplace needs through frequent contact with technical and contracting officials of pertinent government agencies within the intelligence community.
- **Investing in research and development.** We invest in research and development (R&D) that we believe will enable us to develop equipment and services that will satisfy the future global security needs of our customers before our competitors. An important aspect of our R&D efforts is the understanding of information sources that could enhance global security in order to anticipate the future needs of our customers. Not only does this allow us to direct R&D engineering efforts to produce solutions promptly once a customer expresses a

requirement, but it often allows us to educate the customer about potential requirements and simultaneously present a conceptual solution to those requirements.

***Improve our competitiveness by:***

- ***Reducing internal costs.*** When technical difficulty and specialized solutions determine the customer's need, our technological capabilities often provides the basis for sole-source awards. We believe that we may have additional customer opportunities where we need to be more focused on product and system cost. We are implementing a broad initiative to reduce our indirect costs through organizational consolidation, administrative cost reduction, improving the utilization of our facilities, and reevaluating our cumulative benefits costs. This initiative began in 2008 and was a contributory factor in completing the year within our original rate projections.
- ***Implementing a new, multi-rate strategy.*** Historically, we have had success in capturing sole-source product development efforts. We intend to seek additional business opportunities as a specialized system integrator and in providing engineering services, in order to enhance our competitiveness in these markets. In fiscal year 2009, we have commenced implementation of a new multiple rate structure.
- ***Attract and develop a highly skilled workforce.*** Our success depends on the continued contributions of our engineers, scientists, and managers. We intend to continue to hire and develop the highly skilled professionals needed for our work. We seek to recruit exceptional recent college graduates and former key personnel from the defense and intelligence communities. We believe we can continue to attract, develop, and retain employees by offering competitive compensation and benefits, challenging assignments, and opportunities for career growth.

***Expand the business in our core ISR market by:***

- ***Developing flexible products.*** We believe a combination of our highly skilled staff and leading-edge technology offers opportunities into new programs and markets. We develop products that can be used as originally designed or, with modest customization, tailored to satisfy the needs of new customers. We use prior product development efforts to offer customers cost-effective solutions with a shortened time to market. We also see opportunity in implementing our next-generation signal processing in software product solutions, enabling customers to upgrade their signal collection capabilities without extensive hardware recapitalization costs.
- ***Migrating up the value chain from established product positions.*** In many of our programs, we provide knowledge of the signal source and threat environment, which can be leveraged to expand our participation and provide end-to-end responsibility for a payload subsystem or fully integrated sensor system. We believe we can leverage our unique domain knowledge to expand our products and services, and serve as a system integrator in niche areas.
- ***Increasing our business with existing customers and broadening our customer base.*** We intend to increase our services to meet the needs of the military and to increase our participation in emerging programs as the Department of Defense recapitalizes its inventory of ISR equipment. We believe the adaptability and flexibility of our SIGINT and sensor surveillance products make them attractive in joint or coalition warfare environments.
- ***Expanding our role in providing support services.*** We plan to expand our presence near customer facilities to provide high quality engineering services in support of major community developments to meet the government outsourcing of key technical support services. We also plan to offer sustaining operational and maintenance support in our products and systems as they are deployed.
- ***Considering strategic acquisition opportunities.*** We will assess opportunities to acquire companies of complementary technologies, products, or businesses that accelerate our growth in our core ISR markets. Our strategy is to provide incremental extension, not a transformational shift in the company.

## **Operating Divisions and Products**

We execute our strategy by allocating our programs into three market-facing divisions to optimize management span of control and ensure a strong customer focus. Our three business-focused divisions are Broadband Communication Systems, Intelligence and Electronic Warfare Systems, and Sensor Systems. In addition to these divisions, we operate a single Operations and Infrastructure division for manufacturing, purchasing, facilities, security, publications, and sustaining engineering support. The specific focus of our three customer-facing divisions is described below.

## Broadband Communication Systems

The Broadband Communication Systems Division provides COMINT products and services for use in the collection and processing of high capacity broadband network activities to enable monitoring and detection of illicit communications and cyber attacks. Many of these products and systems use an advanced selection architecture (ASA) that incorporates custom and commercially available hardware and software in configurations capable of being readily deployed, adapted, or upgraded by us or our customers. This design methodology allows us to adapt our products and systems to meet new mission profiles without significant redesign efforts. The benefits of our design methodology include shorter development and implementation schedules, flexibility, improved interoperability with other systems, and reduced system upgrade costs to our customers.

Our key broadband products include voice grade channel (VGC) processors, software products, and bandwidth compression processing. The prices of these products may vary based on the level of customization required by our customers. These processors are designed to process VGCs, which carry audio and other signals. The standard telecommunication systems used throughout the world put a large number of VGCs on a single carrier channel to increase the number of signals that can be transmitted at a particular frequency. Our VGC processors can scan thousands of signals in less than one second, evaluate their characteristics, and use sophisticated processing technology to detect and record relevant data that is then analyzed by United States Government personnel. Our broadband software products are applied to commercial off-the-shelf hardware processors. With current state-of-the-art computer and component technologies (for example, field-programmable gate arrays, Pentium processors, G4 processors), global security requirements can often be met by utilizing off-the-shelf "computing engines." We develop our software products so the signal processing can be performed on these engines when applicable to reduce development costs to our customers. Our bandwidth compression technology was developed to maximize performance of satellite communication networks.

## Intelligence and Electronic Warfare Systems

Accurate and comprehensive information regarding foreign affairs and developments affecting international security has become increasingly important to the United States Government. We believe the political instability in certain regions such as the Middle East, Eastern Europe, Africa, and Central and South America and the ongoing counterterrorism campaign have heightened the United States Government's need to be able to monitor activities in foreign countries. In order to obtain information about activities from foreign threats, the United States Government gathers and analyzes communication signals emanations. The Intelligence and Electronic Warfare Systems Division provides research and development for the collection and analysis of tactical wireless communications and electronic intelligence.

The ever-increasing commercial development of telecommunications equipment has led to a significant increase in the overall quantity of information communicated and an increase in the density of signals transmitted throughout the RF spectrum. This increase can be seen in the proliferation of facsimile, cellular, and digital signal telecommunications equipment and in the global information network (such as the Internet), resulting in a significant increase in the amount of information being communicated. Our tactical wireless COMINT systems automatically scan and process thousands of modern telecommunication signals to isolate and collect specific communications from targets of interest. Our products and systems are tailored for small tactical and hand-launched platforms and vehicles. Our miniature, low power systems can be used on a broad range of strategic and military platforms including aircraft, unmanned aerial vehicles (UAV), land-mobile vehicles, fixed site installations, and relocatable land sites.

Our key COMINT products include wideband processors and collection products. These processors "groom" telecommunication signals for further processing by VGC processors by adjusting for signal distortions that commonly occur during transmission. The two primary types of distortions that these processors correct are multipath interference (caused by the reception of a signal and its reflections) and co-channel interference (caused by the reception of multiple interfering signals). Commercial telecommunication companies overcome these distortions with careful alignment and tuning that requires interruption of the telecommunication signals. Our wideband processors perform this alignment independently and automatically by using proprietary adaptive algorithms that let the processors "learn" how to adjust their parameters to process the incoming signals. Our collection products include low-cost, small receivers that collect information in very complex signaling formats and optimize multiple antenna inputs to overcome co-channel interference and certain forms of multi-path interference.

Our key ELINT and ESM products include our Pegasus family of collection systems. Pegasus is a flexible product line developed to characterize enemy weapon systems and provide battlefield mapping and force protection by using unmanned aerial vehicles and smaller manned aircraft as standoff sensing platforms. Pegasus exploits the

latest threat emitters in a significantly smaller form factor to facilitate collection operations by using stealthy platforms. After four years of internal R&D, we completed successful development and qualification of our initial Pegasus product in 2008 and anticipate government orders in 2009.

The prices of these products and systems may vary based on the level of customization required by our customers.

### **Sensor Systems**

In the current counterterrorism campaign, the United States Government is expanding the collection of signature information to aid in the detection and location of potential terrorist activities. The Sensor Systems Division provides advanced sensor signal processing solutions for space-based, airborne, terrestrial, and undersea sensor technologies. Our sensor processing products consist of advanced digital signal processing hardware and software to automatically process the results of physical phenomena sensors to detect abnormalities of interest. We provide remote sensing by processing and analyzing information from sound to light spectrum sources including radar, magnetic, infrared, electro-optical, hyperspectral, and visible light.

Our key sensor solutions include synthetic aperture sonar, radar, magnetic, and explosive detection products. These systems are designed to detect abnormalities in the marine environment such as the presence of a submarine, mines tethered to the ocean floor, and terrorist activities such as attempts to destruct a national infrastructure (such as pipelines or communication lines) on the ocean floor. Our solutions consist of active sensors, such as synthetic aperture sonar and radar detection of periscopes, and passive sensing, such as magnetic detection of submarines. The prices of these products and systems may vary based on the level of customization required by our customers. We are also developing integrated sensor systems to detect explosive materials deployed in vehicles, luggage, and cargo containers. We are currently developing a third-generation system by using associated particle imaging (API) for the United States Government, and anticipate completion in 2009.

### **Segments**

We have reviewed our business operations and determined that we operate in a single homogeneous business segment. We sell similar products and services with similar economic characteristics to similar classes of customers, primarily to the United States Government, its agencies, or prime contractors for the United States Government. Our technologies and operations of our divisions are highly integrated. Management reviews revenues and costs on an individual contract basis as a single, integrated business segment.

### **Customers**

Since our inception, purchases by the United States Government have accounted for almost all of our revenues. These purchases occur in two ways: through contracts directly with the government and subcontracts to prime contractors. Direct contracts with the United States Government accounted for approximately 65%, 69%, and 60% of revenues in fiscal years 2008, 2007, and 2006, respectively. The subcontracts under which we supply products or services to prime contractors that have contracts with the United States Government accounted for approximately 31%, 29%, and 37% of revenues in fiscal years 2008, 2007, and 2006, respectively.

Our United States Government customers consist of military and intelligence agencies that have signal reconnaissance needs. Within our primary customers, we have contracts with approximately 40 different organizations, each with separate budgets and contracting authority.

The following table identifies the source of our revenues for fiscal years 2008, 2007, and 2006 by customer type.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Intelligence agencies	80%	78%	74%
Military services	16%	20%	23%
Commercial	4%	2%	2%
Foreign	—	—	1%
	<u>100%</u>	<u>100%</u>	<u>100%</u>

a dash (—) designates less than 1% revenue concentration

Contracts with all offices of two intelligence agencies accounted for approximately 25% and 50% of revenues in fiscal year 2008, approximately 26% and 47% of revenues in fiscal year 2007, and approximately 24% and 46% of revenues in fiscal year 2006, respectively. Contracts with one branch of the military accounted for approximately 12%, 15%, and 17% of revenues in fiscal years 2008, 2007, and 2006, respectively.

Foreign revenues consist of contracts directly with foreign governments or foreign contractors.

### Contracts

Most of our business is conducted under contracts that include United States Government security requirements. Our contracts with United States Government agencies are of two types, as described below.

Sole-source contracts are awarded by the United States Government when a single contractor is deemed to have an expertise or technology that is superior to that of competing contractors. Potential suppliers compete informally for sole-source contracts through R&D investment and marketing efforts. This competition requires a contractor to identify the United States Government's requirements early and invest in developing potential solutions so that the contractor can demonstrate a distinguishing expertise or technology promptly after the United States Government has identified a requirement. Sole-source contracts are awarded without a formal competition.

Competitive-bid contracts are awarded based on formal proposal evaluation criteria established by the procuring agency. Interested contractors prepare a bid and proposal in response to the agency's request. A bid and proposal is usually prepared in a short time period (for example, 45 days) in response to a deadline, and requires the extensive involvement of numerous technical and administrative personnel. Competitive-bid contracts are awarded after a formal bid and proposal competition among suppliers.

The following table identifies the allocation of revenues from all sources from which we generated revenue for fiscal years 2008, 2007, and 2006.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Sole-source contracts	76%	76%	70%
Competitive-bid contracts	24%	24%	30%
	<u>100%</u>	<u>100%</u>	<u>100%</u>

Sole-source and competitive-bid contracts can be fixed-price contracts, where we agree to deliver equipment for a fixed price and we assume the risk of cost overruns; cost-reimbursement contracts, where we are reimbursed for our direct and indirect costs and paid a negotiated profit; or time-and-materials contracts, where we recognize revenue by applying a negotiated billing rate to the level of effort. Historically, we achieve greater profit margins from our fixed-price contracts than from our cost-reimbursement and time-and-materials contracts. In recent years, our significant contracts have been cost-reimbursement contracts. In addition, we have one agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize.

The following table represents our revenue concentration during the respective periods by contract type.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Cost-reimbursement contracts	69%	71%	79%
Fixed-price contracts	10%	14%	17%
Time-and-materials contracts	18%	14%	4%
Royalty contracts	3%	1%	—
	<u>100%</u>	<u>100%</u>	<u>100%</u>

a dash (—) designates less than 1% revenue concentration

Most of our fixed-price contracts are for the manufacture of multiple units of our established products, rather than the development of new products. We believe that the risk of cost overruns is much less in the case of fixed-price manufacturing contracts, where the product has already been developed and at least a prototype made, than in the case of fixed-price development contracts.

The following table represents the revenue concentration from significant contracts during the respective periods. Due to security requirements of the United States Government, we are unable to disclose the actual contract names. Therefore, for the ease of the reader, we have renamed these contracts for reporting purposes in the table below.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
ASA	15%	9%	—
High Beam	15%	—	—
Tiffany	13%	15%	5%
Stone Face II	12%	12%	5%
Specter	5%	14%	17%
Stone Face I	—	—	9%
Simple Edge	—	—	7%
	<u>60%</u>	<u>50%</u>	<u>43%</u>

a dash (—) designates less than 5% revenue concentration

The following contracts were indefinite-delivery-indefinite-quantity (IDIQ) contracts: ASA, Tiffany, Stone Face II, Stone Face I, and Simple Edge. Under the terms of this type of contract, the Government may issue individual delivery orders (DOs) for goods or services that they require. Each DO is treated as a separate contract, which may be awarded on a cost-reimbursable, fixed-price, or time-and-materials basis. We aggregate the DOs under each IDIQ contract for purposes of distinguishing significant revenue concentrations.

ASA is a time-and-materials contract, which significantly increased the revenue concentration of time-and-materials contracts during fiscal year 2008 and 2007. All of the other contracts referenced were cost-reimbursement contracts.

We are subject to price redetermination on certain fixed-price United States Government contracts if it is determined that we did not price our products and services consistent with the requirements of the Federal Acquisition Regulations. During fiscal years 2008, 2007, and 2006, we did not have material claims against us for noncompliance with these regulations.

Almost all of our contracts contain termination clauses that permit contract termination by the customer for cause upon our default or without cause for the convenience of the other contracting party. In either case, terminations could adversely affect our operating results. Under contracts terminable at the convenience of the United States Government, a contractor is generally entitled to receive payments for its allowable costs and, in general, the proportionate share of fees or earnings for the work done. Contracts that are terminable for default generally provide that the United States Government only pay for the work it has accepted and may require the contractor to pay for the incremental cost of reprocurement and may hold the contractor liable for damages incurred by the customer. For example, a portion of our Stone Face II contract was terminated for convenience. See page 11 for further details.

## **Backlog**

Our backlog, which consists of anticipated revenues from the uncompleted portions of existing contracts and excludes unexercised contract options, was \$124,784,000, \$126,708,000, and \$104,952,000, at October 31, 2008, 2007, and 2006, respectively. Anticipated revenues included in backlog may be realized over a multi-year period and include expected revenues from contracts that are fully funded as well as from contracts that are only partially funded. We include expected revenues from a contract in backlog when the contract is signed by us and by our customer. We believe the backlog figures are firm, subject only to the cancellation and modification provisions contained in our contracts. (See "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations, New Orders and Backlog".) Because of possible future changes in delivery schedules and cancellations of orders, backlog at any particular date is not necessarily representative of actual revenue to be expected for any succeeding period, and actual revenue for the year may not meet or exceed the backlog represented. We may experience significant contract cancellations that were previously booked and included in backlog. During the third quarter of fiscal year 2008, we received a termination for the convenience of the Government related to several delivery orders under the Stone Face II IDIQ contract. New orders and backlog are expected to be reduced by approximately \$4 to \$5 million when we complete settlement of the terminated efforts.

## **Research and Development**

We conduct R&D pursuant to United States Government R&D contracts and as part of our own R&D investment. We believe that our investment in R&D provides us with a significant competitive advantage. Research and development expenses incurred by us were approximately \$13,116,000, \$14,204,000, and \$19,165,000 in fiscal years 2008, 2007, and 2006, respectively. As a percent of revenue, R&D equated to 7.0%, 8.3%, and 11.8% in fiscal years 2008, 2007, and 2006, respectively. We anticipate that our future R&D spending will be 7% to 9% of future total revenues.

## **Competition**

The global security market is highly competitive and we expect that competition will continue to increase in the future. Some of our current and potential competitors have significantly greater technical, manufacturing, financial, and marketing resources than we do. Our current competitors include L-3 Communications, BAE Systems, Boeing, Raytheon Corporation, General Dynamics, Harris Corporation, Lockheed Martin, Northrop Grumman, Argon ST, Digital Receiver Technology, ITT Corporation, QinetiQ, Sierra Nevada Corporation, Science Applications International Corporation, Sparta, Inc., and Thales. Substantial competition could impose pricing pressure on sales of our products, could develop and introduce new products meeting market demand more quickly than we can, and could result in lower revenue and decreased sales, which would have a materially adverse effect on our financial condition and operating results.

The competition for competitive-bid contracts differs from the competition for sole-source contracts. Companies competing for competitive-bid contracts prepare bids and proposals in response to either commercial or government requests and typically compete on price. Potential suppliers compete informally for sole-source contracts through R&D investment and marketing efforts. Companies competing for sole-source contracts attempt to identify the customer's requirements early and invest in solutions so that they can demonstrate a distinguishing expertise or technology promptly after the customer has identified a signal processing requirement. The principal factors of competition for sole-source contracts include investments in R&D; the ability to respond promptly to government needs; and product price relative to performance, quality, and customer support. We believe that we compete favorably on each of these factors.

## **Proprietary Rights**

The United States Government has rights to most of the technology that we have developed under Government contracts, including rights to permit other companies, including our competitors, to use this technology to develop products for the United States Government. To our knowledge, the United States Government has not exercised these rights related to our products.

As of October 31, 2008, we had five issued patents. We believe that, given the rapidly changing nature of signal collection and processing technology, our future success will depend primarily on the technical competence and creative skills of our personnel, rather than the legal protection afforded by patents. We attempt to protect our trade secrets and other proprietary information through agreements with customers, employees, and consultants, and through other security measures. To the extent we wish to assert our patent rights, we cannot be sure that any claims of our patents will be sufficiently broad to protect our technology. In addition, there can be no assurance that any patents issued to us will not be challenged, invalidated, or circumvented; that any rights granted under

these patents will provide us adequate protection; or that there will be sufficient resources to protect and enforce our rights. In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States. Although we do not believe that we are infringing upon the intellectual property rights of others, it is possible that such a claim will be asserted against us in the future. In the event any third party makes a claim against us for infringement of patents or other intellectual property rights of a third party, such claims, with or without merit, could be time-consuming and result in costly litigation. In addition, we could experience loss or cancellation of customer orders, could experience product shipment delays, or could be subject to significant liabilities to third parties. If our products were found to infringe on a third party's proprietary rights, we could be required to enter into royalty or licensing agreements to continue selling our products. Royalty or licensing agreements, if required, may not be available under acceptable terms or at all, which could seriously harm our business. Our involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets and expertise could have a materially adverse effect on our business.

### **Government Regulations**

We must comply with regulatory requirements of federal, state, and municipal authorities applicable to companies contracting with the United States Government and its agencies, including regulations concerning employment obligations and affirmative action, workplace safety, and protection of the environment. Most importantly, we must comply with detailed Government procurement and contracting regulations and with United States Government security regulations, certain of which carry substantial penalties for noncompliance or misrepresentation in the course of negotiations. Failure to comply with our Government procurement or contracting obligations or security obligations could result in penalties imposed on us or suspension from Government contracting, which would prevent us from selling our products to the United States Government, severely limiting our ability to operate our business and generate revenue, resulting in a materially adverse effect on our financial condition and operating results.

Additionally, all of our products and services are subject to United States export laws and regulations. Exports of commercial products, software, technology, and services are subject to controls under the Export Administration Regulations (EAR) and exports of military products, software, technical data, and services are subject to controls under the International Traffic in Arms Regulations (ITAR). Our ability to export is dependent upon our ability to obtain the appropriate export authorization from the United States Government. If we are unable to receive the appropriate export authorization, we may be prohibited from selling our products and services internationally, which may limit our sales and may have a material adverse effect on growing this portion of our business.

While compliance with applicable regulations has not adversely affected our operations in the past, we cannot be sure that we will continue to be in compliance in the future or that these regulations will not change, resulting in increased operational costs.

### **Employees**

Our success is dependent on the skills and dedication of our employees. Our staff includes a mix of experienced professionals and recent college graduates who, together, provide experienced thought leadership with the latest technical skills to meet the challenges presented by our customers. As of December 12, 2008, we had 672 employees. Our business requires the majority of our technical employees to obtain and retain security clearances from the United States Government, which limits the available pool of eligible candidates for such positions to those who can satisfy the prerequisites to obtaining these clearances. We have a United States Government-sanctioned security program that allows staff members to obtain appropriate clearances. Approximately 78% of our staff has security clearances. Our future success is dependent on attracting, retaining, and motivating qualified key management and technical personnel, whose loss could adversely affect our business materially. We offer a robust employee benefits program and challenging work environment to maintain high employee morale.

### **Item 1A: Risk Factors**

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Our future performance is subject to a variety of risks. If any of the following risks actually occurs, our business could be harmed and the trading price of our common stock could decline. In addition to the following disclosures, please refer to the other information contained in this report, including consolidated financial statements and the related notes.

*We may not be successful in our expansion of our products and markets, and may not realize the benefits of our investments in these new markets.* Over the last several years, we have made investments in other areas complementary to our historic COMINT offerings. As a result of these investments, including our acquisition of Dynamics Technology, Inc. (DTI) in July 2005, and our research and development into the ELINT market, we

have expanded our product offerings, approached new customers, and entered into new markets for advanced digital signal processing products, systems, and services in support of ISR for global security. Our operations during fiscal year 2008 have been, and are expected to continue to be, substantially influenced by the operations of the businesses we acquired from DTI as well as from our continued investment in products and markets complementary to our existing and new businesses.

***Any decrease in expected product sales during a period could adversely impact our revenues, results of operations, and financial condition.*** From time to time, we have derived a significant portion of our revenue from product sales. In recent periods, however, we have been focusing on sales of systems and software, and targeting larger programs. In addition, we have experienced some seasonality in product sales to the United States Government, with more product sales occurring in the second half of the fiscal year than in the first. The amount and timing of Government purchases of products is unpredictable, and fluctuates significantly from period to period, making it difficult for us to predict the amount of revenue we will generate from product sales in any particular period, and causing our revenues to fluctuate from period to period. If we are not able to generate revenues from product sales as expected in a particular period, we may fail to meet our revenue expectations and the expectations of industry analysts and investors, which could cause our stock price to decline.

***If we are unable to recruit, train, and retain key personnel with required security clearances, our ability to develop, introduce, and sell our products may be adversely impacted.*** Our ability to execute our business plan is contingent upon successfully attracting and retaining qualified employees who obtain, or are able to obtain and retain, necessary Government security clearances. If we fail to attract and retain qualified employees who can obtain the necessary security clearances, our business could be significantly harmed. The loss of the services of our qualified employees, the inability to attract or retain qualified personnel in the future, or delays in hiring required personnel could negatively impact our ability to develop, introduce, and sell our products. In addition, employees may leave us and subsequently compete against us.

Many of the personnel we hire will need United States Government security clearances in order to perform tasks required on our Government contracts, and without such clearances, employees cannot work on the majority of our projects. We have found that there is a shortage of qualified personnel possessing the necessary clearances, and new security clearances are taking longer to be granted. If we are not able to obtain security clearances for our personnel where required, they will be unable to perform tasks requiring clearances, and we may be unable to satisfy the terms of our contracts, resulting in customer dissatisfaction and possible loss of current or future contracts.

***Any reduction in Government spending on ISR could materially adversely impact our revenues, results of operations, and financial condition.*** Historically, defense and intelligence agencies of the United States Government have accounted for almost all of our revenues. There are risks associated with programs that are subject to appropriation by Congress, which could be potential targets for reductions in funding to pay for other programs. Future reductions in United States Government spending on global security or future changes in the kind of products or services required by the United States Government agencies could limit demand for our products and services, which could result in failure to achieve anticipated revenues, resulting in a materially adverse effect on our operating results and financial condition.

In the event there are shifts in responsibilities and functions among the government agencies responsible for United States defense and intelligence, it could result in a reduction of orders for global security by the defense and intelligence agencies that have historically been our major customers. Our relationships with other Government agencies to which responsibilities and functions for our contracts have shifted may not be as strong as our relationships with current customer agencies. Accordingly, a reduction in contracts from our customer agencies may not be offset by contracts from other United States Government agencies. Even if other agencies increase spending for global security, we may not secure the same amount of work from these agencies. As a result, demand for our products and services could decline, resulting in a decrease in revenues, and could adversely affect our operating results and financial condition materially.

***Stop-work orders could negatively impact our operating results and financial condition.*** Almost all of our contracts contain stop-work clauses that permit the Government or other contracting party, at any time, by written order, to stop work on all or any part of the work called for by the contract for a period of ninety days. Within the ninety-day period, the other contracting party may cancel the stop-work order and resume work or terminate all or part of the work covered by the stop-work order. There can be no assurance that stop-work orders will not be received in future periods. If we receive stop work orders, our orders and backlog may be reduced, and we may fail to achieve anticipated revenues.

***If we are unable to comply with complex Government regulations governing security and contracting practices, we could be disqualified as a supplier to the United States Government.*** As a supplier to United States Government defense and intelligence agencies, we must comply with numerous regulations, including those governing security and contracting practices. Failure to comply with these procurement regulations and practices could result in fines being imposed against us or our suspension for a period of time from eligibility for bidding on, or for award of, new Government contracts. If we are disqualified as a supplier to Government agencies, we will lose most, if not all, of our customers, revenues from sales of our products would decline significantly, and our ability to continue operations would be seriously jeopardized. Among the causes for disqualification are violations of various statutes, including those related to procurement integrity, export control, United States Government security regulations, employment practices, protection of the environment, accuracy of records in the recording of costs, and foreign corruption.

***The Government may investigate and make inquiries of our business practices and conduct audits of contract performance and cost accounting.*** The Government audits and investigations can take several years to complete. Depending on the results of these audits and investigations, the Government may make claims against us or take exception to certain costs we determined to be recoverable. In the period management determines recoverability is not likely, operating income would be reduced.

For example, during fiscal year 2008, the Defense Contract Audit Agency (DCAA) advised us that we are considered a major contractor and are subject to more audits and oversight. We have several audits ongoing. The results of these and future audits could result in sustained claims against us. In those cases where we believe that the Government is likely to prevail, we have reduced operating income by establishing appropriate reserves for the estimated loss.

***We depend on revenues from a few significant contracts, and any loss, cancellation, reduction, or delay in these contracts could harm our business.*** From time to time, including recent periods, we have derived a material portion of our revenue from one or more individual contracts that could be terminated by the customer in full or in part at the customer's discretion. In the past, we have experienced a significant reduction of, and stop work order on, one of our largest contracts. We expect that in future periods we may again enter into individual contracts with significant revenue concentrations. In addition, the majority of our contracts are with a limited number of Government agencies. If our individually large contracts were terminated or substantially reduced, we could fail to achieve expected revenues and net income.

United States Government contracts are generally not fully funded at inception and funding may be terminated or reduced at any time. We act as a prime contractor or subcontractor for many different United States Government programs. Department of Defense and intelligence contracts typically involve long lead times for design and development and are subject to significant changes in contract scheduling. Programs can be partially funded initially, and additional funds may or may not be allocated. The termination or reduction of funding for a Government program would result in a loss of anticipated future revenues attributable to that program.

Our backlog as of October 31, 2008, was approximately \$124.8 million and includes orders under awards that in some cases extend several years. The actual receipt of revenues on awards included in backlog may never occur or may change because a program schedule could change or the program could be canceled, or a contract could be reduced, modified, or terminated early.

***Our business depends upon our relationships with, and the performance of, our prime contractors.*** We expect to continue to depend on relationships with other contractors for a substantial portion of our revenues in the foreseeable future. Our business, prospects, financial condition, or operating results could be adversely affected if other contractors terminate or reduce their subcontracts or relationships with us, either because they choose to establish relationships with our competitors or because they choose to directly offer services that compete with our business. Our business also suffers if the prime contractor fails to win the contract, or if the Government terminates or reduces these other contractors' programs or does not award them new or additional contracts.

In addition, on those contracts for which we are not the prime contractor, the United States Government could terminate a prime contract under which we are subcontractor, regardless of the quality of our performance as a subcontractor. A prime contractor's performance deficiencies could adversely affect our status as a subcontractor on the program, jeopardize our ability to collect award or incentive fees, cause customers to delay payments, and result in contract terminations.

***We depend on revenues from a few significant customers; the loss of any significant customer could have an adverse effect on our business.*** Our success will depend on our continued ability to develop and manage relationships with significant customers. The markets in which we sell our products are dominated by a relatively small number of Governmental agencies and allies of the United States Government, thereby limiting the number

of potential customers. Our dependence on large orders from a relatively small number of customers makes our relationship with each customer critical to our business. We cannot be sure that we will be able to retain our largest customers, that we will be able to attract additional customers, or that our customers will continue to buy our products and services in the same amounts as in prior years. The loss of one or more of our largest customers, any reduction or delay in sales to these customers, our inability to successfully develop relationships with additional customers, or future price concessions that we may have to make could significantly harm our business.

***Continued competition in ISR may lead to a reduction in our revenues and market share.*** The global security market is highly competitive and we expect that competition will continue to increase in the future. Our current competitors have significantly greater technical, manufacturing, financial, and marketing resources than we do. We expect that more companies will enter the market for global security, possibly resulting in pricing pressures on our products and services. We may not be able to compete successfully against either current or future competitors. Increased competition could result in reduced revenue, lower margins, or loss of market share, any of which could significantly harm our business. Our competitors may introduce improved products with lower prices, and we would have to do the same to remain competitive.

Unexpected increases in the cost to develop or manufacture our products under fixed-price contracts may cause us to experience unreimbursed cost overruns resulting in reduced profit margins or increased loss provisions. A significant portion of our revenue is derived from fixed-price contracts. Under fixed-price contracts, unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in materials costs, unfavorable indirect rate variances, inefficiencies, or other factors, are borne by us. We have experienced cost overruns in the past that have resulted in losses on certain contracts, and may experience additional cost overruns in the future. Such cost overruns would increase our operating expenses, reduce our net income and earnings per share, and could have a material adverse effect on our future results of operations and financial condition.

Fixed price contracts use percentage-of-completion accounting to determine profit margins. Under generally accepted accounting principles unexpected cost over-runs can change the percentage completion estimates and result in reduced profit margins and the reversal of previously recognized profits in addition to reducing future period profits. Although we believe that our profit margins are fairly stated and that adequate provisions for losses for our fixed-price contracts are recorded in our financial statements as required under accounting principles generally accepted within the United States, there can be no assurance that our contract profit margins will not decrease or our loss provision will not increase in the future.

***We derive revenue from royalties, the timing of which can be difficult to predict and sustain.*** We derive royalty income from the sale of products licensed to other third parties for sale, and expect to continue to derive royalty income in the future. Revenue derived from royalties provides greater profitability to us than revenue from the sale of our products and services. Accordingly, our operating income and earnings per share will be impacted by the comparative mix of revenue from our digital signal processing products, systems, and services and revenue derived from royalty income. Although we have licensed one of our products for sale by a third party, and expect to increase our efforts in future periods, we have not historically devoted significant resources to licensing our technologies. We believe there is a life cycle to the technology upon which this royalty revenue is based. We anticipate that royalty revenues from this agreement could decline in future periods.

Our future ability to generate royalty income depends upon:

- Our ability to secure patent coverage for our technologies and enter into license agreements with potential licensees
- The ability of our licensees to develop and commercialize successful products that incorporate our technologies
- The rate of adoption of our technologies by, and the incorporation of our technologies into products of, other parties

In addition, royalty-based income is subject to the willingness and ability of licensees to design and assemble products using our technology, the pricing and demand for products incorporating our technology, and our ability to negotiate and enforce agreements for the determination and payment of royalties. It is difficult to predict when we will enter into additional license agreements, if at all. The timing of our receipt of royalty payments, including payments from our existing royalty-based arrangement, is also difficult to predict, and may fluctuate from period to period, causing our revenues to fluctuate from period to period, which may significantly impact our quarterly or annual operating results. If we are not able to generate royalty income as expected in a particular period, we may

fail to meet our revenue expectations, our operating income may decline disproportionately, and we may fail to meet the expectations of industry analysts and investors, which could cause our stock price to decline.

***Unexpected contract terminations could negatively impact our operating results and financial condition.***

Almost all of our contracts contain termination clauses that permit contract termination upon default or for the convenience of the other contracting party. In either case, termination could adversely affect our operating results and financial condition. During the third quarter of fiscal year 2008, we received a termination for the convenience of the Government related to several delivery orders under the Stone Face II IDIQ contract. New orders and backlog are expected to be reduced by approximately \$4 to \$5 million when we complete settlement of the terminated efforts. We received no such terminations in fiscal years 2007 and 2006.

***Our future revenues are inherently unpredictable, our operating results are likely to fluctuate from period to period, and if we fail to meet the expectations of securities analysts or investors, our stock price could decline significantly.*** Our quarterly and annual operating results have fluctuated in the past and are likely to fluctuate significantly in the future due to a variety of factors, some of which are outside our control. Accordingly, we believe that period-to-period comparisons of our results of operations are not meaningful and should not be relied upon as indications of future performance. Some of the factors that could cause our quarterly or annual operating results to fluctuate include conditions inherent in Government contracting and our business such as the timing of cost and expense recognition for contracts, the United States Government contracting and budget cycles, and contract closeouts. Because we base our operating expenses on anticipated revenue trends and a high percentage of our expenses are fixed in the short term, any delay in generating or recognizing forecasted revenues could significantly harm our business. Fluctuations in quarterly results, competition, or announcements of extraordinary events such as acquisitions or litigation may cause earnings to fall below the expectations of securities analysts and investors. In this event, the trading price of our common stock could significantly decline. In addition, there can be no assurance that an active trading market will be sustained for our common stock. The stock market in recent years has experienced extreme price and volume fluctuations that have particularly affected the market prices of many technology companies. These fluctuations, as well as general economic and market conditions, may adversely affect the future market price of our common stock.

***We have been named as a party to securities class action and derivative action lawsuits, which may require significant management time and attention and legal expense, and may result in an unfavorable outcome, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows.*** Applied Signal and one officer and one former officer have been named in a purported securities class action complaint filed in the United States District Court, Northern District of California *In re Applied Signal Technology Inc. Securities Litigation*, Master File No. 4:05-cv-1027 (SBA). The amended consolidated complaint is brought on behalf of a putative class of persons who purchased our securities during a class period of August 24, 2004, through February 22, 2005. The complaint alleges that false and misleading statements regarding us were issued during the class period. In addition, we have been named as a nominal defendant in a purported shareholder derivative action filed in the Superior Court, State of California as *Shoemaker v. Devine et al.*, No. 1:08-CV-119810. It is brought on purported behalf of the Company, against current and former members of the Board of Directors, our Chief Financial Officer, and our former Chief Executive Officer, asserting that these individuals breached their fiduciary duties, based on essentially the same allegations as the class action case. We cannot predict whether these actions are likely to result in any material recovery by or expense to AST, and any future unfavorable outcome of either of these proceedings could have an adverse impact on our business, financial condition, and results of operation. At this time, we cannot estimate the amount of possible loss or range of loss that might be incurred as a result of either of these proceedings. We expect to continue to incur legal fees in responding to these lawsuits, including expenses for the reimbursement of legal fees of present and former officers and directors under indemnification obligations. The expense of defending such litigation may be significant. The amount of time to resolve this and any additional lawsuits is unpredictable and these actions may divert management's attention from the day-to-day operations of our business, which could adversely affect our business, results of operations, and cash flows.

***Our market is subject to rapid technological change, and to compete effectively, we must continually introduce new signal processing solutions that achieve market acceptance.*** The market for our products is characterized by rapidly changing technology, frequent new product introductions, changes in customer requirements, and evolving industry standards. We believe that we have been successful to date in identifying certain global security needs early, investing in research and development to meet these needs, and delivering products before our competitors. We believe that our future success will depend upon continued development and timely introduction of products capable of satisfying emerging global security needs. However, we expect that new requirements will continue to emerge. Our future performance will depend on the successful development, introduction, and market acceptance of new and enhanced products that address these new requirements. The introduction of new and enhanced

products may cause our customers to defer or cancel orders for existing products. There can be no assurance that we will be able to develop and market new products successfully in the future or respond effectively to new requirements, or that new products introduced by others will not render our products or technologies noncompetitive or obsolete.

We also may not be able to develop the underlying core technologies necessary to create new products and enhancements or to license these technologies from third parties. Product development delays may result from numerous factors, including:

- Changing product specifications and customer requirements
- Difficulties in hiring and retaining necessary technical personnel
- Difficulties in reallocating engineering resources and overcoming resource limitations
- Difficulties with contract manufacturers
- Changing market or competitive product requirements
- Unanticipated engineering complexities

The development of new, technologically advanced products is a complex and uncertain process requiring high levels of innovation and highly skilled engineering and development personnel, as well as the accurate anticipation of technological and market trends. We cannot ensure that we will be able to identify, develop, manufacture, market, or support new or enhanced products successfully, or on a timely basis, if at all. Further, we cannot ensure that our new products will gain market acceptance or that we will be able to respond effectively to product announcements by competitors, technological changes, or emerging industry standards. Any failure to respond to technological change would significantly harm our business.

***Our results of operations could be negatively impacted if we are required to write off inventory deemed not saleable or usable.*** Some of our products or raw materials may become obsolete or unusable while in inventory. This could be due to changing customer specifications, decreases in demand for existing products, or changes in Government spending on signal intelligence. Work in process deemed not saleable is written off to contract costs in our statement of operations, while unusable raw materials are written off to general and administrative expenses.

***We may lose sales if our suppliers fail to meet our needs.*** Although we procure most of our parts and components from multiple sources or believe that these components are readily available from numerous sources, certain components are available only from sole sources or from a limited number of sources. While we believe that substitute components or assemblies could be obtained, use of substitutes would require development of new suppliers or would require us to re-engineer our products, or both, which could delay shipment of our products and could have a materially adverse effect on our operating results and financial condition.

***Delays in the receipt of contracts could negatively impact our business.*** During our history, the receipt of certain final contracts has periodically been delayed to periods later than originally expected. Delays in the receipt of such orders could result in revenues falling short of estimates. On some of these contracts, we will make expenditures in advance of receipt of the final contract in anticipation of meeting the expected timetables, and will from time to time hire personnel in anticipation of receipt of the contract. If the contract is delayed, these costs are not covered. In addition, gross margins and net income will decrease if we elect to hold our cost structure in place while awaiting the award of delayed contracts.

***Our failure to protect our intellectual property may significantly harm our business.*** Our success and ability to compete is dependent in part on our proprietary technology. We rely on a combination of patent, copyright, trademark, and trade secret laws, as well as confidentiality agreements to establish and protect our proprietary rights. We license certain of our proprietary technology to customers, and we rely largely on provisions of our licensing agreements to protect our intellectual property rights in this technology. To date, we have relied primarily on proprietary processes and know-how to protect our intellectual property. Although we have filed applications for several patents, five of which we currently hold, we cannot ensure that any patents will be issued as a result of pending patent applications or that our issued patents will be upheld. Any infringement of our proprietary rights could result in significant litigation costs, and any failure to adequately protect our proprietary rights could result in our competitors offering similar products, potentially resulting in loss of a competitive advantage and decreased revenues. Despite our efforts to protect our proprietary rights, existing patent, copyright, trademark, and trade secret laws afford only limited protection. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Attempts may be made to copy or reverse engineer aspects of our products or to obtain and use information that we regard as proprietary.

Accordingly, we may not be able to prevent misappropriation of our technology or deter others from developing similar technology. Furthermore, policing the unauthorized use of our products is difficult. Litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. This litigation could result in substantial costs and diversion of resources, and could significantly harm our business.

***The United States Government has rights to our technology that limits our intellectual property rights.***

Although we seek to protect the competitive benefits we derive from our patents, proprietary information, and other intellectual property, we do not have the right to prohibit the United States Government from using certain technologies developed or acquired by us or to prohibit third party companies, including our competitors, from using those technologies in providing products and services to the United States Government. The United States Government has the right to royalty-free use of technologies that we have developed under United States Government contracts. We may commercially exploit those Government-funded technologies and may assert our intellectual property rights against other non-Government users of technology developed by us, but we may not be successful in our efforts to do so.

***Claims that we infringe third-party intellectual property rights could result in significant expenses or restrictions on our ability to sell our products.*** It is possible that from time to time, other parties may assert patent, copyright, trademark, and other intellectual property rights to technologies and in various jurisdictions that are important to our business. Any claims asserting that our products infringe or may infringe proprietary rights of third parties, if determined adverse to us, could significantly harm our business. Any claims, with or without merit, could result in costly litigation, divert the efforts of our technical and management personnel, cause product shipment delays, or require us to enter into royalty or licensing agreements, any of which could significantly harm our business. Royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all. In addition, our agreements with our customers typically require us to indemnify our customers from any expense or liability resulting from claimed infringement of third-party intellectual property rights. In the event a claim against us was successful and we could not obtain a license to the relevant technology on acceptable terms, license a substitute technology, or redesign our products to avoid infringement, our business would be significantly harmed.

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## **Item 1B: Unresolved Staff Comments**

None.

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## **Item 2: Properties**

Our corporate offices, located in Sunnyvale, California, also serve as our primary research and development, engineering, production, marketing, and administrative center. As of October 31, 2008, we leased five buildings in Sunnyvale, California, totaling approximately 266,077 square feet under a lease that expires in March 2012.

In addition, we maintain eleven additional offices within the United States. As of October 31, 2008, we lease the following properties: 61,038 square feet in Annapolis Junction, Maryland (lease expires April 2016); 15,250 square feet in Herndon, Virginia (lease expires March 2011); 10,962 square feet in Hillsboro, Oregon (lease expires October 2009); 27,345 square feet in Salt Lake City, Utah (lease expires October 2009); 32,000 square feet in Allen, Texas (lease expires February 2011); 2,008 square feet in Torrance, California (lease expires October 2010); an additional 39,692 square feet in Torrance, California (lease expires June 2015); 9,785 square feet in Anaheim, California (lease expires May 2010); 9,523 square feet in Arlington, Virginia (lease expires June 2013); 2,309 square feet in Tampa, Florida (lease expires April 2010); and 2,524 square feet in Fairborn, Ohio (lease expires July 31, 2009).

Our business requires that we maintain a facility clearance, sponsored and approved by the United States Government, at most of our offices. This approval could be suspended or revoked if we are found not to have complied with security regulations applicable to such facilities. Any revocation or suspension of such approval that materially delayed delivery of our products to customers would have a material, adverse impact on our ability to manufacture and sell our products and operate our business. Although we have adopted policies directed at assuring our compliance with relevant regulations, there can be no assurance that the approved status of our facilities will continue without interruption.

### **Item 3: Legal Proceedings**

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We are subject to litigation, from time to time, in the ordinary course of business including, but not limited to, allegations of wrongful termination or discrimination, or Governmental agency investigations. As a Government contractor, we may also be subject to investigations by the United States Government for alleged violations of procurement or other federal laws. Under present Government procurement regulations, if judged in violation of procurement or other federal civil laws, we could be suspended or barred from eligibility for awards of new Government contracts.

On March 11 and July 19, 2005, purported securities class action complaints were filed in the United States District Court, Northern District of California. The cases were considered as *In re Applied Signal Technology Inc. Securities Litigation*, Master File No. 4:05-cv-1027 (SBA). The amended consolidated complaint is brought on behalf of a putative class of persons who purchased our company's securities during a class period of August 24, 2004, through February 22, 2005. The complaints name our former Chief Executive Officer, our Chief Financial Officer, and us as defendants, and allege that false and misleading statements regarding us were issued during the class period. On February 8, 2006, the Court dismissed the case with prejudice. On June 5, 2008, the Ninth Circuit reversed the dismissal and remanded to the District Court. We intend to contest this litigation vigorously. Any future unfavorable outcome of the litigation could have an adverse impact on our business, financial condition, and results of operation. At this time, we cannot estimate the amount of possible loss or range of loss that might be incurred as a result of this proceeding.

On August 12, 2008, a purported shareholder derivative action was filed in the Superior Court, State of California as *Shoemaker v. Devine et al.*, No. 1:08-CV-119810. It is brought on purported behalf of the Company, against current and former members of the Board of Directors, our Chief Financial Officer, and our former Chief Executive Officer, asserting that these individuals breached their fiduciary duties, based on essentially the same allegations as the class action case. No damages are specified. On January 9, 2009, the Court sustained demurrers to the Complaint, with leave to amend.

### **Item 4: Submission of Matters to a Vote of Security Holders**

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There were no matters submitted to a vote of security holders during the fourth quarter of the fiscal year.

## Part II

### Item 5: Market for Registrant's Common Equity, Related Shareholder Matters, and Issuer Purchases of Equity Securities

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#### Selected Common Stock Data

Our common stock trades on the NASDAQ Global Select Market under the symbol "APSG." As of October 31, 2008, the closing price of our common stock, as reported on NASDAQ, was \$17.92, and we had approximately 565 registered shareholders of record with our transfer agent. The following table sets forth the high and low closing prices for our common stock over the eight quarters ending October 31, 2008.

Closing prices, as reported on NASDAQ	High	Low
<b>Fiscal year ended October 31, 2007</b>		
First quarter	\$16.25	\$13.45
Second quarter	\$18.57	\$15.13
Third quarter	\$18.19	\$13.89
Fourth quarter	\$15.40	\$12.56
<b>Fiscal year ended October 31, 2008</b>		
First quarter	\$14.42	\$12.58
Second quarter	\$14.05	\$11.00
Third quarter	\$15.95	\$13.33
Fourth quarter	\$18.15	\$13.88

The company has paid dividends at the rate of \$0.50 per share per annum, payable quarterly, since fiscal year 2004. However, the dividend is subject to approval by the Board of Directors, and is reviewed quarterly.

The continued payment of dividends and the amount thereof in the future will depend on a number of factors, including our financial condition, capital requirements, results of operations, future business prospects, and other factors that our Board of Directors may deem relevant.

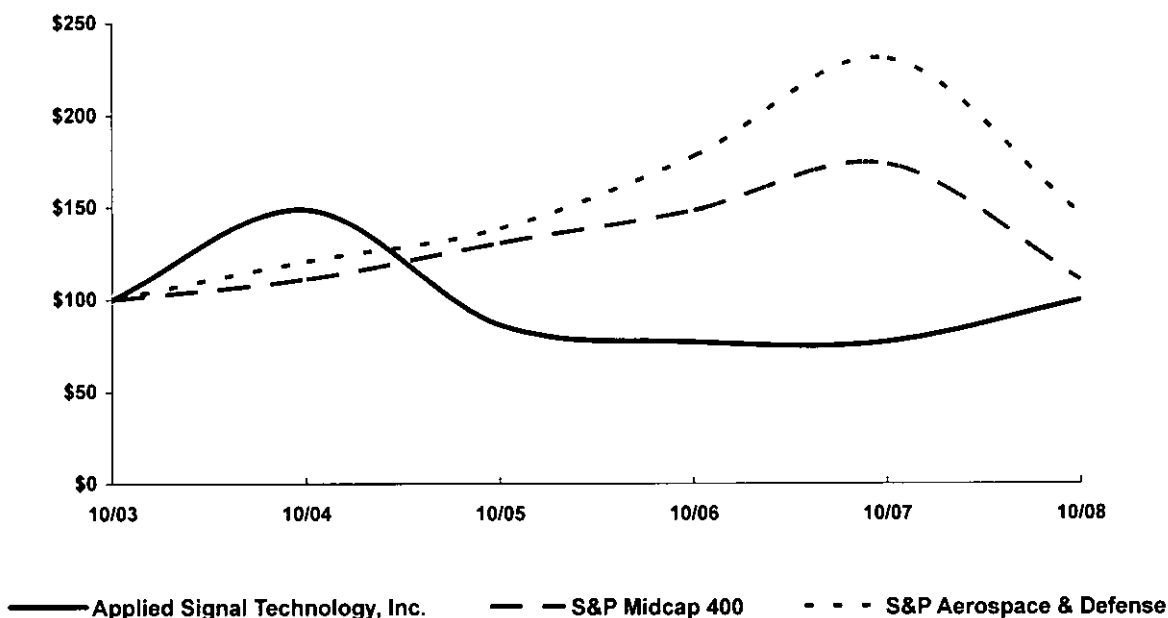
We did not repurchase any of our equity securities during the fourth quarter of fiscal year 2008 nor issue any securities that were not registered under the Securities Act of 1933.

## Comparison of Shareholder Return

Set forth below is a line graph comparing the annual percentage in the cumulative total return on our common stock with the cumulative total return for the Standard & Poor's MIDCAP 400 Index (S&P MIDCAP 400) and the Standard and Poor's Aerospace and Defense Index (S&P Aerospace and Defense) for the five-year period commencing October 31, 2003, and ending on October 31, 2008.

### Comparison of Five-year Cumulative Total Return

Among Applied Signal Technology, Inc., The S&P Midcap 400 Index,  
and The S&P Aerospace and Defense Index



### Cumulative Total Return

	10/03	10/04	10/05	10/06	10/07	10/08
Applied Signal Technology, Inc.	100.00	148.82	86.30	76.87	76.94	99.49
S&P Midcap 400	100.00	111.04	130.63	148.18	173.40	110.17
S&P Aerospace & Defense	100.00	120.71	138.29	177.71	230.51	146.12

*\* Assumes that \$100.00 was invested on 10/31/03 in our common stock and in each index, and that all dividends have been reinvested. Shareholder returns over the indicated period should not be considered indicative of future shareholder returns.*

This stock performance graph does not constitute soliciting material, and should not be deemed filed or incorporated by reference into any other company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate this stock performance graph by reference therein.

## Item 6: Selected Financial Data

(In thousands, except per share data)

	Year Ended October 31,				
Summary of Operations:	2008	2007	2006	2005	2004
Revenues from contracts	\$181,147	\$168,845	\$161,193	\$155,931	\$142,836
Revenues from royalty agreements	5,184	1,530	720	130	—
Total revenues	\$186,331	\$170,375	\$161,913	\$156,061	\$142,836
Operating expenses:					
Contract costs	129,835	116,133	107,898	102,938	94,727
Research and development	13,116	14,204	19,165	16,125	14,166
General and administrative	30,593	28,734	25,978	22,167	16,694
Total operating expenses	173,544	159,071	153,041	141,230	125,587
Operating income	12,787	11,304	8,872	14,831	17,249
Interest income (expense), net	761	683	315	648	576
Income before provision for income taxes	13,548	11,987	9,187	15,479	17,825
Provision (benefit) for income taxes	5,531	5,175	4,860	6,235	5,559
Net income	\$8,017	\$6,812	\$4,327	\$9,244	\$12,266
Cash dividends declared per common share	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Net income per common share:					
Basic	\$0.64	\$0.56	\$0.37	\$0.81	\$1.11
Diluted	\$0.63	\$0.55	\$0.36	\$0.79	\$1.05
Number of shares used in calculating net income per common share:					
Basic	12,475	12,100	11,739	11,400	11,042
Diluted	12,681	12,314	11,994	11,759	11,638

	Year Ended October 31,				
Financial Position at End of Fiscal Year:	2008	2007	2006	2005	2004
Working capital	\$82,614	\$75,337	\$67,188	\$63,188	\$76,659
Total assets	158,019	142,733	136,532	134,621	111,750
Long term debt	3,929	5,357	6,786	8,215	—
Retained earnings	54,626	52,953	52,272	53,853	50,327
Shareholders' equity	124,733	114,836	105,630	98,129	89,563

Note: The financial results in fiscal years 2008, 2007, and 2006 include stock-based compensation expense as a result of adopting SFAS 123 (revised 2004), *Share-Based Payment*. The fiscal year 2005 and thereafter financial results include the results of DTI, since its acquisition in July 2005.

## **Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations**

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The following discussion contains forward-looking statements that involve risks and uncertainties, as discussed in the introduction to "Item 1: Business." Actual results could differ substantially from those anticipated in these forward-looking statements as a result of many factors, including those set forth under "Item 1A: Risk Factors."

### **Overview**

We believe top-line defense community funding is slowing relative to the prior five-year period as a result of anticipated decreases in supplemental budgets and impacts from financial market stimulus packages. We also believe that large defense infrastructure and platform programs will have the largest declines in funding. Despite potential declines in overall defense spending, we believe that interest in intelligence, surveillance, and reconnaissance (ISR) by the United States Government will remain strong to respond to the continuing threat of terrorist activities and irregular war campaigns.

As we look ahead, we believe that spending levels in our high-demand niche categories of procurement will remain strong, even if total defense spending declines.

We are a full service provider of ISR products, systems, and services, serving the defense, intelligence, and homeland security markets. We believe these core markets have strong growth potential and that we are well positioned to benefit from defense spending in these areas. We have strengthened our product development pipeline and debuted three new products: a broadband network analysis product for cyber surveillance, a tactical wireless reconnaissance product capable of addressing 3G communication networks, and a towed synthetic aperture sonar system for port and harbor surveillance.

We continue to focus our operations on delivering strong program performance, meeting staffing requirements, maintaining a competitive cost structure, and expanding our marketplace. Our customers continue to come to us with new requirements for ISR solutions, weighted heavily toward new developments. A significant portion of our revenue continues to be generated by cost-reimbursable contracts that tend to be developmental in nature, and require highly specialized, technical skill sets. We believe that this trend will continue in fiscal year 2009.

We have a firm foundation in our broadband communications and tactical wireless COMINT solutions. These areas continued to remain strong in fiscal year 2008 and we believe that we have solid growth potential in these areas in fiscal year 2009. Over the next several years, we anticipate that the Government will recapitalize a significant portion of its existing SIGINT equipment with upgraded technology. As a result, we anticipate continued strong contract activity in our core space.

During fiscal year 2008, we have focused our activities on expanding our opportunities in adjacent markets. We have continued the development of our synthetic aperture sonar sensor technology. We are developing products for explosives detection that are in the final phase of development. We continue to pursue opportunities in the Department of Homeland Security's SAFECOM and Manhattan II programs for container security and airport cargo and luggage inspection. Our investment in a low power, miniature ELINT payload should provide us the opportunity to expand into a complementary market niche. We completed the development and first article qualification testing of our Pegasus ELINT system and we believe there are market opportunities for this product. As a result of our anticipated growth, we expect to make additional investments of capital and management resources, including additional personnel.

We experienced significant growth in royalty revenue from our one licensing agreement. Our royalties contributed approximately \$5,184,000 to revenues and operating income during fiscal year 2008. We believe that our royalty revenues for fiscal 2009 could be consistent with fiscal 2008.

During fiscal year 2008, we focused on actions to improve our cost competitiveness. We absorbed our indirect rate variance by increasing our revenues over fiscal year 2007, while maintaining our indirect spending levels as a percentage of revenues, which created a favorable indirect rate variance at the end of fiscal year 2008. In addition, we believe we improved our cost structure for fiscal year 2009 by implementing measures to control costs such as providing economical ways to provide certain employee benefits, reducing R&D expenditures, and making certain changes to management.

We also implemented a new multi-rate structure beginning in fiscal year 2009 that we believe should have several positive effects on our business. We believe this rate structure could reduce the cost of our product offerings, allowing us to compete for product sales in highly competitive markets where price is a significant factor. We believe that this new structure could also allow us to compete more effectively on system integration efforts.

Finally, we believe that we will be able to maintain our competitiveness in our emerging professional services business.

Even though our stock compensation expense increased during fiscal year 2008, we have implemented changes to our equity compensation plans and practices to help reduce the impact of our future stock compensation expense. We have granted restricted stock during the past two years, in lieu of stock options, and anticipate this trend will continue in the future. In addition, we have modified our ESPP such that it is non-compensatory as of December 1, 2008.

We held approximately \$54,426,000 of short-term and long-term municipal securities in our investment portfolio at October 31, 2008. Substantially all of our investments in the municipal securities are with A-1/SP-1/AAA (Standard & Poor's), P-1/MIG-1/Aaa (Moody's), and F-1/AA/AAA (Fitch) rated issuers. Further, based on our ability to liquidate our investment portfolio we do not anticipate any liquidity constraints especially in the current credit environment.

**Management Change.** During the second quarter of fiscal year 2008, Mr. Gary L. Yancey, our former Chairman and Chief Executive Officer, resigned as an executive officer and as a member of the Board of Directors. His final date of employment with us was May 30, 2008. Upon Mr. Yancey's resignation, Mr. John P. Devine, a director since 1995, was named non-executive Chairman of the Board of Directors and Mr. William Van Vleet III, our Chief Operating Officer, was appointed as Acting Chief Executive Officer. On August 20, 2008, Mr. Van Vleet was appointed as President, Chief Executive Officer, and a Class I member of the Board of Directors.

Please refer to "Notes to Consolidated Financial Statements, Note 12: Change in Management" for further information.

### **Critical Accounting Policies and Estimates**

**General.** Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements. These consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States, which require management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates. We believe that the estimates, assumptions, and judgments involved in the accounting policies described below have the greatest potential impact on our consolidated financial statements and, therefore, consider these critical accounting policies. See "Notes to Consolidated Financial Statements, Note 1: Summary of Significant Accounting Policies," included elsewhere in this report for more information about these critical accounting policies, as well as descriptions of other significant accounting policies.

**Revenue and cost recognition.** The majority of our contracts are accounted for in accordance with the American Institute of Certified Public Accountants (AICPA) Statement of Opinion 81-1, *Accounting for Performance of Construction-Type and Production-Type Contracts* (SOP 81-1). These contracts are executed by using written contractual arrangements, most of which require us to design, develop, manufacture, and/or modify our complex products, and perform related services according to specifications provided by the customer. A limited number of standalone software contracts are recognized in accordance with the AICPA Statement of Opinion 97-2, *Software Revenue Recognition* (SOP 97-2). In accordance with SOP 97-2, we may, at times, record an amount of deferred revenue associated with contracts that are billed and for which customers have paid in advance of performance requirements set forth in these contracts.

As a supplier to the United States Government, we are required to comply with numerous regulations, including those governing security and contracting practices. Failure to comply with these procurement regulations and practices could result in fines being imposed against us or our suspension for a period of time from eligibility for bidding on, or for award of, new Government contracts. Among the causes for the suspension are violations of various statutes, including those related to procurement integrity, export control, United States Government security regulations, employment practices, protection of the environment, accuracy of records in the recording of costs, and foreign corruption. The Government may investigate and make inquiries of our business practices and conduct audits of contract performance and cost accounting. The Government audits and investigations can take several years to complete. Depending on the results of these audits and investigations, the Government may make claims against us or take exception to certain costs we determined to be recoverable. In the period management determines recoverability is not likely, reserves are established for the estimated loss by a charge to operating income.

We account for cost-reimbursement contracts by charging actual labor, materials, and other direct costs, plus estimated indirect costs of operations as incurred, including overhead, research and development, and general and

administrative expenses (incurred costs). Stock compensation expense is generally not reimbursable under these contracts. During fiscal year 2008, we did not apply indirect costs to subcontract costs that were in excess of \$250,000 and that met certain other predetermined criteria. In fiscal year 2009, we will apply indirect costs to all subcontract costs.

We recognize contract revenues and profits on cost-reimbursement contracts by applying an estimated fee rate to all incurred costs on an individual contract basis. Fee calculations are based on either negotiated fee amounts or management's assessment of the fee amounts that are likely to be earned. On cost-reimbursement contracts, we may bear unexpected cost increases for purposes of maintaining customer relationships. Historically, the effect on operating results and financial condition from cost-reimbursement losses has been minimal.

Our policy for recognizing interim fees on our cost-plus-award-fee contracts is based on management's assessment as to the likelihood that the award fee or an incremental portion of the award fee will be earned, on a contract-by-contract basis. Management bases its assessments on numerous factors, including contract terms, nature of the work to be performed, our relationship and history with the customer, our history with similar types of projects, and our current and anticipated performance on the specific contract. No award fee is recognized until management determines that it is probable that an award fee or a portion thereof will be earned. Historically, management's estimates have generally been consistent with actual fees awarded. However, changes in facts and circumstances could arise within an award fee period causing management to either lower or raise the award fee estimate in the period in which the changes occur.

Our time-and-materials contracts are performed on a level-of-effort basis. We recognize revenue for these contracts by applying a negotiated billing rate to the level of effort.

We account for fixed-price contracts by using the percentage-of-completion method. Under this method, we charge labor, materials, and other direct costs, plus estimated indirect costs of operations as they are incurred. Each period, we recognize as revenue a portion of the contract revenue, based on estimated profits and the degree of completion of the contract as measured by a comparison of the actual costs incurred and the estimated total costs to complete. On fixed-price contracts, we bear the risk of any unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in material costs, inefficiencies, or other factors, and these costs could have a materially adverse effect on our results of operations and financial condition.

For those contracts in which all of the terms have not yet been finalized, revenue does not include an estimated fee rate on cost.

Management reviews contract performance, costs incurred, and estimated completion costs regularly. We adjust revenues and profits on all contracts in the period in which changes, including anticipated losses, become determinable.

Precontract costs represent costs incurred in anticipation of specific expected future contract awards and costs incurred in connection with ongoing contracts for which contract modifications have not been defined or completed at the end of the reporting period. These costs are included in other current assets on the balance sheet. Precontract costs for the periods ending October 31, 2008, and October 31, 2007, were approximately \$1,283,000 and \$4,465,000, respectively. Approximately \$4,113,000 of the October 31, 2007, balance was recognized as revenues during fiscal year 2008.

We have one royalty licensing agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize. Our royalties contributed approximately \$5,184,000, \$1,530,000, and \$720,000 to revenues and operating income during fiscal years 2008, 2007, and 2006, respectively.

***Indirect rate variance adjustment to operations.*** We record contract revenues and costs of operations for interim reporting purposes based on annual targeted indirect rates. During our interim reporting periods, variances may accumulate between the actual indirect rates and the annual targeted rates. Timing-related indirect spending variances are removed from contract costs, research and development, and general and administrative expenses, and are included in inventory as part of work in process during these interim reporting periods. These rates are reviewed regularly, and we record adjustments for any material, permanent variances in the period they become estimable. We believe that this estimate is the preferred practice used within our industry. At year-end, we adjust the revenues and costs for actual indirect rates.

Our accounting policy for recording the indirect rate variance is based on management's belief that variances accumulated during interim reporting periods will be absorbed by expected contract activities during the remainder of the year. We consider the rate variance to be unfavorable when our actual indirect rates are greater

than our annual targeted rates. In contrast, a favorable rate variance occurs when our actual indirect rates are lower than our annual targeted rates. During interim reporting periods, we record unfavorable rate variances as reductions to operating expenses and increases to work in process inventory. We record favorable rate variances as increases to operating expenses and decreases to work in process inventory.

If we anticipate that actual contract activities will be different than planned levels, there are alternatives we can utilize to reduce the variance: we can adjust some of our planned indirect spending during the year; we can request a modification of our billing rates to our customers through the Defense Contract Audit Agency any time during the fiscal year, in accordance with Federal Acquisition Regulations; or we can record adjustments to expense based on estimates of future contract activities for the remainder of the fiscal year.

If our rate variance is unfavorable, the modification of our billing rates will likely increase revenue and operating expenses, and decrease the unfavorable indirect rate variance accumulated in inventory. Fee percentages on fixed-price and time-and-materials contracts will generally decline as a result of any increase to indirect costs. Fee percentages on active cost-reimbursable contracts will generally be unaffected as a result of any increase to indirect costs. Fee percentages on completed cost-reimbursable contracts will generally be reduced. If our rate variance is favorable, the modification of our billing rates will decrease revenue and operating expenses, and decrease the favorable indirect rate variance accumulated in inventory. In this event, fee percentages on fixed-price and time-and-materials contracts will generally increase. Fee percentages on cost-reimbursable contracts will generally be unaffected as a result of any reduction to indirect costs, due to the fact that programs will typically expend all of the funds available. Any impact on operating income, however, will depend on a number of other factors, including mix of contract types, contract terms, anticipated performance on specific contracts, and anticipated changes in inventory.

At the end of fiscal year 2008, we absorbed a favorable indirect rate variance that accumulated during the fiscal year by modifying our billing rates to our customers. Consequently, we decreased revenues by approximately \$1,657,000 and operating expenses by approximately \$1,243,000, which represented a reduction to operating income of approximately \$414,000. The reduction to operating income included an increase to G&A expense of approximately \$1,241,000, primarily associated with inventory purchases related to one product during the fourth quarter.

At the end of fiscal year 2007, we absorbed an unfavorable indirect rate variance that accumulated during the fiscal year by modifying our billing rates to our customers, which increased revenues by approximately \$958,000 and operating expenses by approximately \$2,224,000, which represented a reduction to operating income of approximately \$1,266,000. As of the end of the third quarter of fiscal year 2007, we had anticipated a reduction to operating income and recorded a profit reserve of \$1,300,000.

At the end of fiscal year 2006, we absorbed an unfavorable indirect rate variance that accumulated during the fiscal year by modifying our billing rates to our customers, which increased revenues by approximately \$3,387,000 and operating expenses by approximately \$5,725,000, which represented a reduction to operating income of approximately \$2,338,000. As of the end of the third quarter of fiscal year 2006, we had anticipated a reduction to operating income and recorded a profit reserve of \$1,000,000.

***Inventory valuation and disposal.*** We provide advanced digital signal processing products and systems to the United States Government. Typical life cycles of our products are eight to ten years or more. In addition, we maintain spare parts in order to repair the equipment. We evaluate our inventory quarterly, at interim reporting periods, and assess our ability to sell our products, which includes raw materials. Historically, we have sold our inventory at or above cost, so there was typically no decrement in valuation. When we determine that a product has reached the end of its life cycle or there is no longer a need for a certain product, typically, we will dispose of any remaining inventory, and record the associated reduction to inventory.

We recorded a write-down of approximately \$1,329,000 during fiscal year 2008, to reflect the estimated market value of one class of our inventoried products; these charges were included in contract costs in our statement of operations. Disposals associated with our raw material represent a minor amount and is included in general and administrative expenses on the statement of operations due to the fact that raw materials could be used in a variety of situations other than contract costs, including R&D. During fiscal year 2008, disposals of obsolete products amounted to approximately \$251,000. Inventory activities during fiscal year 2007 included a write-down of approximately \$415,000 and disposals of obsolete products of approximately \$187,000.

***Income taxes.*** We estimate our income taxes in each of the taxing jurisdictions in which we operate. Our effective tax rate can differ from the statutory rate primarily due to the non-tax-deductible nature of certain types of stock-based compensation expense. In addition, our process involves estimating our current tax expense together with assessing any temporary differences resulting from the different treatment of certain items, such as the timing for

recognizing certain expenses, for tax and accounting purposes. These differences may result in deferred tax assets and liabilities, which are included in our consolidated balance sheet. We are required to assess the likelihood that our deferred tax assets, which include our net operating loss carryforwards and temporary differences that are expected to be deductible in future years, will be recoverable from future taxable income or other tax planning strategies. If recovery is not likely, we have to provide a valuation allowance based on our estimates of future taxable income in the various taxing jurisdictions, and the amount of deferred taxes that are ultimately realizable. The provision for current and deferred taxes involves evaluations and judgments of uncertainties in the interpretation of complex tax regulations by various taxing authorities. Actual results could differ from our estimates.

We also recognize the impact of an uncertain income tax position on the income tax return at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority according to Financial Interpretation No. 48, *Accounting for Uncertainty in Income Taxes - an interpretation of FASB Statement No. 109*. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained.

Please refer to "Notes to Consolidated Financial Statements, Note 7: Income Taxes" for further information.

**Price redetermination.** As a Government contractor, we are subject to price redetermination on certain fixed-price contracts if it is determined that we did not price our products and services consistent with the requirements of the Federal Acquisition Regulations. We did not incur any material price redeterminations on any of our contracts during fiscal years 2008, 2007, and 2006.

**Goodwill valuation.** We test goodwill for possible impairment on an annual basis and at any other time if events occur or circumstances indicate that the current carrying amount of goodwill may not be recoverable. Circumstances that could trigger an impairment test include, but are not limited to, a significant adverse change in the business climate or legal factors, an adverse action or assessment by a regulator, unanticipated competition, and loss of key personnel.

The determination as to whether a write-down of goodwill is necessary involves significant judgment based on the short-term and long-term projections of future performance as well as the estimation of discount rates.

To perform the goodwill impairment test, we determine the fair value of the reporting unit and compare the fair value to the reporting unit's carrying value. We believe AST is one reporting unit, and therefore, we compare the fair value of AST to the total net asset value on our balance sheet. If our total net asset value were to exceed our fair value, we would perform the second step of the impairment test. In the second step, we would compare the implied fair value of our goodwill to our carrying amount. If no impairment exists under step one, then step two is not necessary.

Based on our analysis, we concluded no impairment existed at October 31, 2008.

**Long-lived asset valuation (property, plant and equipment, and intangible assets).** We will test long-lived assets or asset groups for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances that could trigger a review include, but are not limited to: significant decreases in the market price of the asset, significant adverse changes in the business climate or legal considerations, accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset, current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset, and current expectation that the asset will more likely than not be sold or discarded significantly before the end of its estimated useful life.

We assess recoverability based on the carrying amount of the asset and its fair value, which is generally determined based on the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the asset. We recognize an impairment loss when the carrying amount is not recoverable and exceeds the fair value.

Based on our analysis, no impairment was indicated at October 31, 2008, under the provisions of SFAS No. 142, *Goodwill and Other Intangible Assets*.

**Share-based payment.** We adopted SFAS 123 (revised 2004), *Share-Based Payment* (SFAS 123R), effective at the beginning of fiscal year 2006. Applying this complex standard to value equity-based compensation requires us to use significant judgment and to make estimates, particularly for the assumptions used in the Black-Scholes valuation model, such as stock price volatility and expected option lives, as well as for the expected option forfeiture rates.

We elected to use the modified prospective transition method as permitted by SFAS 123R. Stock-based compensation expense for awards granted subsequent to November 1, 2005, was based on the grant-date fair

value estimated in accordance with the provisions of SFAS 123R. For awards granted prior to, but not yet vested, as of November 1, 2005, stock-based compensation expense was based on the grant-date fair value previously estimated in accordance with the original provisions of SFAS 123. We recognize the stock compensation expense on a straight-line basis over the requisite service period of the award, which generally equals the vesting period of each grant.

During fiscal year 2008, our ESPP allowed employees to purchase shares of common stock at 85% of the fair market value at the lower of either the date of enrollment or the date of purchase. For offering periods beginning prior to June 1, 2007, our ESPP had a twenty-four-month offering period with four six-month purchase periods within each offering period. If the fair market value on the purchase date was lower than the fair market value on the offering date, all participants were withdrawn from the offering period and re-enrolled into a new offering period. Effective May 31, 2007, we modified our ESPP such that the length of all offering periods, beginning June 1, 2007, is six months. Consequently, there is no reset feature associated with offering periods beginning June 1, 2007. As a result of the modification to the ESPP, the December 1, 2006, offering period, ending November 30, 2008, was the final twenty-four-month offering. On August 20, 2008, the Board of Directors increased the purchase price and eliminated the look-back provision for offering periods beginning on or after December 1, 2008. The purchase price for participants will be 95% of the fair market value on the date of purchase, and therefore, will be prospectively non-compensatory under the provisions of SFAS 123R.

Our closing stock price on the November 30, 2007, ESPP purchase date was lower than the closing stock price on the December 1, 2006, offering date. Therefore, 361 participants were re-enrolled from the original twenty-four-month offering period ending on November 30, 2008, into a new six-month offering period, beginning December 1, 2007, and ending May 31, 2008. This re-enrollment effectively canceled the final six-month purchase period of the original twenty-four-month offering. As a result of the modification, approximately \$89,000 of incremental compensation expense was generated at December 1, 2007, which was recognized during the remainder of fiscal year 2008.

In addition, we recorded additional stock based compensation expense of approximately \$304,000 during fiscal year 2008 associated with the acceleration of unvested stock options and restricted stock for our former Chief Executive Officer.

The following table sets forth the total stock-based compensation expense resulting from stock options, restricted stock, and ESPP activity included in our condensed consolidated statements of operations (in thousands, except share data).

	Year Ended October 31,		
	2008	2007	2006
Contract costs	\$2,747	\$2,388	\$2,493
Research and development	177	177	229
General and administrative	1,855	1,585	1,561
Stock-based compensation expense before income taxes	\$4,779	\$4,150	4,283
Income taxes	(1,029)	(850)	(804)
Stock-based compensation expense after income taxes	\$3,750	\$3,300	\$3,479
Reduction to basic net income per share	\$0.30	\$0.27	\$0.30
Reduction to diluted net income per share	\$0.30	\$0.27	\$0.29

The increase in our stock-based compensation expense during fiscal year 2008 is due primarily to the impact associated with the reset provision of the final twenty-four month offering of our ESPP and to the acceleration of the vesting of equity awards to our former Chief Executive Officer.

Please refer to "Notes to Consolidated Financial Statements, Note 1: Organization and Summary of Significant Accounting Policies, Stock-Based Compensation" for further information.

**Allowance for bad debt.** Since the majority of our revenues are generated from the United States Government, its agencies, or prime contractors for the United States Government, we regard the credit risk of our business to be minimal. We record allowances for bad debt as a reduction to accounts receivable and an increase to bad debt

expense. These allowances are recorded in the period a specific collection problem is identified. Once the receivable is deemed uncollectible, the allowance is reversed and the receivable is written off. Charges to bad debt expense were not significant during fiscal years 2008, 2007, and 2006.

### Operating Results – Fiscal Years Comparison

The following table sets forth, for the periods indicated, statements of operations data as a percentage of revenues from contracts, and, at the end of each period indicated, our backlog.

	Year Ended October 31,		
	2008	2007	2006
Revenues	100.0%	100.0%	100.0%
Operating expenses:			
Contract costs	69.7%	68.2%	66.6%
Research and development	7.0%	8.3%	11.8%
General and administrative	16.4%	16.9%	16.1%
Total operating expenses	93.1%	93.4%	94.5%
Operating income	6.9%	6.6%	5.5%
Interest income (expense), net	0.4%	0.4%	0.2%
Income before provision (benefit) for income taxes	7.3%	7.0%	5.7%
Provision (benefit) for income taxes	3.0%	3.0%	3.0%
Net income	4.3%	4.0%	2.7%
Backlog (thousands of dollars)	\$124,784	\$126,708	\$104,952

### Results

Revenues for fiscal year 2008 were \$186,331,000, up 9.4% from revenues of \$170,375,000 recorded during fiscal year 2007. In fiscal year 2008, new orders decreased 3.2% and ending backlog decreased 1.5% compared to fiscal year 2007.

Operating income for fiscal year 2008 was \$12,787,000 compared to operating income of \$11,304,000 recorded during fiscal year 2007. Operating income was higher for fiscal year 2008 when compared to fiscal year 2007 primarily due to an increase in royalties of approximately \$3,654,000, for which there are essentially no related costs, associated with the licensing of intellectual property into commercial satellite communications markets, and secondarily to increased profitability generated from engineering development contracts. The positive impact to operating income was offset by decreased revenues from our standard products, which tend to be more profitable. Our product sales declined due to a decrease in demand for our standard products.

Net income for fiscal year 2008 was \$8,017,000, or \$0.63 per diluted share, compared to net income of \$6,812,000, or \$0.55 per diluted share, for fiscal year 2007. Our tax rates for fiscal years 2008 and 2007 were approximately 41% and 43%, respectively.

In fiscal year 2007, revenues increased 5.2%, new orders increased 53.6%, and ending backlog increased 20.7% compared to fiscal year 2006. Operating income for fiscal year 2007 was \$11,304,000 compared to operating income of \$8,872,000 recorded during fiscal year 2006. Operating income was higher for fiscal year 2007 when compared to fiscal year 2006 due to improved program profitability.

### Revenues

Revenues were approximately \$186,331,000, \$170,375,000, and \$161,913,000 for fiscal years 2008, 2007, and 2006, respectively. Revenues increased by 9.4% during fiscal year 2008 over fiscal year 2007 and increased by 5.2% during fiscal year 2007 over fiscal year 2006.

Revenues generated by our development programs increased by approximately \$17,170,000 in fiscal year 2008 compared to the same period in fiscal year 2007. This increase included fiscal year 2008 revenues recognized from pre-contract costs of approximately \$4,113,000 incurred during fiscal year 2007. Revenues from

development programs increased by approximately \$8,240,000 during fiscal year 2007 compared to the same period in fiscal year 2006. This increase included revenues recognized from pre-contract costs of approximately \$5,502,000 incurred during fiscal year 2006.

Product sales decreased by approximately \$4,868,000 during fiscal year 2008 compared to the same period in fiscal year 2007. During fiscal year 2007, our product sales declined by approximately \$589,000 compared to fiscal year 2006.

We have one royalty agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize. Revenues from royalties increased by approximately \$3,654,000 during fiscal year 2008 over fiscal year 2007, and increased by approximately \$810,000 during fiscal year 2007 over fiscal year 2006.

The following table represents our revenue concentration (as a percentage of total revenues) during the respective periods by revenue type.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Development revenues	88%	86%	86%
Product revenues	9%	13%	14%
Royalty revenues	3%	1%	—
	<u>100%</u>	<u>100%</u>	<u>100%</u>

a dash (—) designates less than 1% revenue concentration

Our contracts can be either fixed-price contracts, where we agree to deliver equipment for a fixed price and assume the risk of cost overruns; cost-reimbursement contracts, where we are reimbursed for our direct and indirect costs and paid a negotiated profit; or time-and-materials contracts, where we recognize revenue for these contracts by applying a negotiated billing rate to the level of effort. Cost-reimbursement and time-and-materials contracts typically do not return as high a profit margin as fixed-price contracts, and accordingly, our profit margin will be affected by the mix of our orders by contract type. The following table represents our revenue concentration (as a percentage of total revenues) during the respective periods by contract type.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Cost-reimbursement contracts	69%	71%	79%
Fixed-price contracts	10%	14%	17%
Time-and-materials contracts	18%	14%	4%
Royalty contracts	3%	1%	—
	<u>100%</u>	<u>100%</u>	<u>100%</u>

a dash (—) designates less than 1% revenue concentration

The following table represents the revenue concentration of our significant contracts during the respective periods. Due to security requirements of the United States Government, we are unable to disclose the actual contract names. Therefore, for the ease of the reader, we have renamed these contracts for reporting purposes in the table below.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
ASA	15%	9%	—
High Beam	15%	—	—
Tiffany	13%	15%	5%
Stone Face II	12%	12%	5%
Specter	5%	14%	17%
Stone Face I	—	—	9%
Simple Edge	—	—	7%
	<b>60%</b>	<b>50%</b>	<b>43%</b>

a dash (—) designates less than 5% revenue concentration

The following contracts were indefinite-delivery-indefinite-quantity (IDIQ) contracts: ASA, Tiffany, Stone Face II, Stone Face I, and Simple Edge. Under the terms of this type of contract, the Government may issue individual delivery orders (DOs) for goods or services that they require. Each DO is treated as a separate contract, which may be awarded on a cost-reimbursable, fixed-price, or time-and-materials basis. We aggregate the DOs under each IDIQ contract for purposes of distinguishing significant revenue concentrations.

ASA is a time-and-materials contract, which significantly increased the revenue concentration of time-and-materials contracts during fiscal year 2008 and 2007. All of the other contracts referenced were cost-reimbursement contracts.

The following table identifies the source of our revenues (as a percentage of total revenues) for fiscal years 2008, 2007, and 2006 by customer type.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Intelligence agencies	80%	78%	74%
Military	16%	20%	23%
Commercial	4%	2%	2%
Foreign	—	—	1%
	<b>100%</b>	<b>100%</b>	<b>100%</b>

a dash (—) designates less than 1% revenue concentration

Within the customer types, contracts with two intelligence agencies and one branch of the military represented a significant portion of revenues.

The table below identifies the revenue concentration (as a percentage of total revenues) from all contracts with each significant customer.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
First intelligence agency	25%	26%	24%
Second intelligence agency	50%	47%	46%
One branch of the military	12%	15%	17%
	<b>87%</b>	<b>88%</b>	<b>87%</b>

Revenues from the United States Government can also be categorized as direct purchases and subcontracts, where we are the supplier to another contractor. The following table distinguishes revenue (as a percentage of total revenues) between those two categories.

	FY08	FY07	FY06
Direct purchases	65%	69%	60%
Subcontracts	31%	29%	37%
	96%	98%	97%

### **New Orders and Backlog**

We received new orders of approximately \$185,139,000, \$191,193,000, and \$124,481,000 during fiscal years 2008, 2007, and 2006, respectively. During the third quarter of fiscal year 2008, we received a termination for the convenience of the Government related to several delivery orders under the Stone Face II IDIQ contract. New orders and backlog are expected to be reduced by approximately \$4 to \$5 million when we complete settlement of the terminated efforts. Our backlog consists of the uncompleted portions of existing contracts (excluding unexercised contract options). At the end of fiscal year 2008, ending backlog was approximately \$124,784,000. Reported backlog includes both funded and unfunded portions of contract values. There is no assurance or obligation that contracts will be fully funded. To the extent that contracts are not fully funded, there will be a reduction to backlog in a future period. The fiscal year 2008 backlog represents a 1.5% decrease to the backlog of \$126,708,000 at the end of fiscal year 2007. The fiscal year 2007 backlog represents a 20.7% increase to fiscal year 2006.

### **Contract Costs**

Contract costs consist of direct costs incurred in the performance of contracts, including labor, materials, and overhead costs. Contract costs were approximately \$129,835,000, or 69.7% of revenues, in fiscal year 2008 compared to approximately \$116,133,000, or 68.2% of revenues, in fiscal year 2007, and approximately \$107,898,000, or 66.6% of revenues, in fiscal year 2006. Contract costs increased in absolute dollars and as a percentage of revenues during fiscal year 2008 primarily due to increased contract activity related to our development contracts, our ability to recognize pre-contract costs incurred during fiscal year 2007, and an inventory write-down of approximately \$1,329,000. Contract costs increased in absolute dollars during fiscal year 2007 primarily due to increased contract activity related to our development contracts and our ability to recognize pre-contract costs incurred during fiscal year 2006. Contract costs increased as a percentage of revenues during fiscal year 2007 due to our ability to recognize pre-contract costs incurred during fiscal year 2006.

### **Research and Development Expenses**

Company-directed investment in research and development consists of expenditures recoverable from customers through billing rates and expenditures funded by us from operations. R&D expenses were approximately \$13,116,000, or 7.0% of revenues, in fiscal year 2008 compared to approximately \$14,204,000, or 8.3% of revenues, in fiscal year 2007 and approximately \$19,165,000, or 11.8% of revenues, in fiscal year 2006. R&D expenses decreased in absolute dollars and as a percentage of revenues during fiscal year 2008 primarily due to directing our efforts toward meeting our contractual obligations. In addition, we manage the combination of company-directed R&D, proposal, and marketing expenditures as a total investment and as part of our indirect rate structure. Our proposal expenditures were high during fiscal year 2007. In addition, our analysis during the second and third quarters of fiscal year 2007 indicated that our indirect rates at the end of fiscal year 2007 would be higher than planned levels. In order to minimize the impact of the projected indirect rate increase, we reduced R&D activities. We anticipate that our future R&D spending will be 7% to 9% of future total revenues.

### **General and Administrative Expenses**

General and administrative (G&A) expenses include administrative salaries, costs related to marketing and proposal activities, costs related to product warranties, and other administrative costs. General and administrative expenses were approximately \$30,593,000, or 16.4% of revenues, in fiscal year 2008 compared to approximately \$28,734,000, or 16.9% of revenues, in fiscal year 2007 and approximately \$25,978,000, or 16.1% of revenues, in fiscal year 2006. G&A expenses were higher in absolute dollars during fiscal year 2008 compared to fiscal year 2007 primarily due to severance costs of approximately \$1,180,000 associated with the termination of our former Chief Executive Officer and an increased allocation of G&A expenses associated with inventory purchases related

to one class of products of approximately \$1,337,000. These increases were partially offset by a decrease to bid and proposal expenditures of approximately \$1,519,000. G&A expenses were higher in absolute dollars and as a percentage of revenues during fiscal year 2007 compared to fiscal year 2006 due an overall increase in contract activities and bid and proposal expenditures during fiscal year 2007.

### **Interest Income and Other, Net**

Interest income and other, net for fiscal year 2008, was approximately \$1,296,000 compared to approximately \$1,356,000 and \$1,024,000 of interest income in fiscal years 2007 and 2006, respectively. Interest income decreased during fiscal year 2008 due to lower yields within our investment portfolio. Interest income increased during fiscal year 2007 due to higher yields and higher investment balances.

### **Interest Expense**

Interest expense for fiscal year 2008 was approximately \$535,000 compared to approximately \$673,000 and \$709,000 in fiscal years 2007 and 2006, respectively. Interest expense has declined in fiscal years 2008 and 2007 due to the reduction to our Term Loan with Wells Fargo through scheduled principal payments.

### **Provision for Income Taxes**

Our provision for income taxes for fiscal years 2008, 2007, and 2006 resulted in income tax expense of approximately \$5,531,000, \$5,175,000, and \$4,860,000, respectively. The effective tax rate for fiscal years 2008, 2007, and 2006 were approximately 41%, 43%, and 53%, respectively. The decrease in our tax rate in fiscal year 2008 is primarily due to a combination of discrete events associated with a change in our method of calculating the depreciation of fixed assets for tax purposes and R&D credits.

During the second quarter of fiscal year 2008, we filed an Application for Change in Accounting Method with the Internal Revenue Service (IRS) under the automatic-consent provisions. Based upon the change in method filed with the IRS, we re-measured our deferred tax asset balance related to the determination of tax basis depreciation on certain property and equipment assets as of October 31, 2006. This led to a tax benefit of approximately \$333,000.

During the third quarter of fiscal year 2008, we recorded additional discrete tax benefit items, which led to a net reduction to income tax expense of approximately \$176,000. These additional discrete items included a reduction to income tax expense of approximately \$303,000 associated with R&D credits, offset by an increase to tax expense of approximately \$108,000 associated with a reduction to tax-exempt interest taken on our income tax returns for fiscal year 2007.

During the fourth quarter of fiscal year 2008, we recorded additional R&D credits due to the enactment of the Emergency Economic Stabilization Act of 2008, which extended the Federal Research & Development Tax Credit from December 31, 2007, through December 31, 2009.

The decrease in our tax rate in fiscal year 2007 from fiscal year 2006 was primarily due to an increase in our pre-tax income, which reduced the impact of non-deductible stock-based compensation expense. In addition, a greater portion of our investments was in tax-free municipal securities.

### **Analysis of Liquidity and Capital Resources**

Our primary sources of liquidity during fiscal year 2008 were cash flows generated from operations, the issuance of common stock through stock purchases under our ESPP, and the exercise of options granted under our employee stock option plans. We have reduced option grants in favor of restricted stock awards and have modified our ESPP. Subsequent to the modification of our ESPP, participation has significantly declined. We believe that cash from the issuance of common stock under our ESPP in future periods may decline by approximately \$1 to \$2 million in future periods, when compared to fiscal year 2008.

**Cash from operating activities.** Net cash from operating activities has fluctuated significantly from year to year. Net cash provided by operating activities was approximately \$28,163,000, \$14,096,000, and \$10,787,000 in fiscal years 2008, 2007, and 2006, respectively. The year-to-year variances are primarily the result of changes in net income, accounts receivable, inventories held by us, contract risk activity, and accounts payable and accrued liabilities.

Net income for fiscal year 2008 was approximately \$8,017,000, a \$1,205,000 increase from fiscal year 2007. Net income for fiscal year 2007 was approximately \$6,812,000, an increase of \$2,485,000 from fiscal year 2006.

Accounts receivable balances decreased by approximately \$4,361,000 during fiscal year 2008, increased by approximately \$3,897,000 during fiscal year 2007, and decreased by approximately \$7,887,000 during fiscal year 2006. During fiscal year 2008, we generated revenues of approximately \$186,331,000 and collected approximately \$191,443,000. During fiscal year 2007, we generated revenues of approximately \$170,375,000 and collected approximately \$166,478,000. In fiscal year 2006, we generated revenues of approximately \$161,914,000 and collected approximately \$169,801,000.

Inventories, prepaid expenses, and other current assets increased by approximately \$2,697,000 in fiscal year 2008, decreased by approximately \$2,680,000 and increased by approximately \$7,867,000 in fiscal years 2007 and 2006, respectively. Inventory balances increased by approximately \$2,196,000. The increase in inventory included an increase to work-in-process inventory by approximately \$3,642,000, primarily associated with two products, and a reduction due to an inventory write-down of approximately \$1,329,000. Current deferred tax assets increased by approximately \$3,643,000 primarily due to an increase of approximately \$1,125,000 associated with unrecognized tax benefits recorded during fiscal year 2008, and a reclass from long-term deferred tax assets of approximately \$1,025,000, associated with our net operating loss carryforward. Our pre-contract costs decreased by approximately \$3,182,000 primarily due to our ability to obtain funding for the ASA and Simple Edge contracts. The decrease during fiscal year 2007 is primarily due to a decrease of prepaid income taxes of approximately \$1,690,000 and a decrease in pre-contract costs of approximately \$1,202,000. The leading factor for the increase in fiscal year 2006 was the increase in pre-contract costs of approximately \$4,621,000, which was due to the timing of our contract activities in fiscal year 2006. Prepaid income taxes increased in fiscal year 2006 by approximately \$1,690,000 and prepaid expenses increased approximately \$666,000. In addition, 2006 inventory balances increased by approximately \$809,000.

During fiscal year 2008, we received a payment of approximately \$877,000 for lease incentives associated with our facility in Torrance, California.

Accounts payable and accrued liabilities balances increased in fiscal year 2008 by approximately \$5,454,000, decreased in fiscal year 2007 by approximately \$1,565,000, and decreased in fiscal year 2006 by approximately \$4,151,000. The increase during of fiscal year 2008 included accrued severance for our former Chief Executive Officer of approximately \$1,003,000. Accounts payable increased by approximately \$1,839,000 due to the timing of our vendor payments. Other accrued liabilities increased by approximately \$1,956,000 primarily due to recording unrecognized tax benefits and related interest of approximately \$1,620,000.

During fiscal year 2007, accounts payable balances decreased by approximately \$1,405,000 and accrued payroll liabilities decreased approximately \$709,000. The primary reason for the decline in fiscal year 2006 was the decrease in accounts payable of approximately \$3,308,000 due to the overall decrease in our subcontract costs in fiscal year 2006. In addition, income taxes payable decreased by approximately \$605,000 and accrued payroll balances decreased by approximately \$383,000.

**Cash from investing activities.** Net cash used in investing activities during fiscal years 2008, 2007, and 2006 was approximately \$24,829,000, \$9,985,000, and \$22,890,000, respectively.

During fiscal year 2008, we purchased approximately \$109,964,000 of investment securities, while \$88,935,000 matured. Fiscal year property and equipment purchases included approximately \$1,339,000 in computer equipment and approximately \$1,247,000 in test equipment.

During fiscal years 2007 and 2006, we increased our investment in tax-exempt securities that were classified as short-term or long-term investments. Fiscal year 2007 property and equipment purchases of approximately \$4,451,000 included leasehold improvement efforts of approximately \$1,901,000 associated with our new facilities in Torrance, California, approximately \$1,456,000 in computer equipment, and approximately \$515,000 in test equipment. Fiscal year 2006 property and equipment purchases were approximately \$5,037,000, which included approximately \$3,008,000 in equipment purchases and approximately \$1,804,000 in leasehold improvements, primarily to support the new facility in Annapolis Junction, Maryland, and to improve the existing facilities in Sunnyvale, California, and Arlington, Virginia.

**Cash from financing activities.** Net cash used in financing activities during fiscal years 2008, 2007, and 2006 were approximately \$3,916,000, \$3,055,000, and \$2,623,000, respectively.

The sources of cash from financing activities for fiscal years 2008, 2007, and 2006 were from the purchase of common stock under our ESPP and the cash received from stock option exercises. Loan payments totaled approximately \$1,428,000 during fiscal year 2008 and \$1,429,000 during fiscal years 2007 and 2006.

Dividend payments in fiscal year 2008 were the same as for fiscal years 2007 and 2006, at \$0.50 per share per annum. Dividend payments were approximately \$6,290,000, \$6,074,000, and \$5,858,000 in fiscal years 2008,

2007, and 2006, respectively. The year-over-year increases are due to increases in common stock outstanding resulting from the purchases of common stock under our stock compensation plans.

Cash is generated primarily from operating activities, employee stock activities, and investing activities. At October 31, 2008, we held in our investment portfolio approximately \$54,426,000 of short-term and long-term municipal securities. Substantially all of our investments in the municipal securities are with A-1/SP-1/AAA (Standard & Poor's), P-1/MIG-1/Aaa (Moody's), and F-1/AA/AAA (Fitch) rated issuers.

Our investment policy prohibits our investment in auction rate securities, mortgage-backed securities, and asset-backed securities. Insured municipal notes or bonds are also prohibited, with the exception of daily and weekly variable rate demand notes that contain a hard put feature.

Based on our ability to liquidate our investment portfolio and our expected operating cash flows, we do not anticipate any liquidity constraints as a result of the current credit environment.

We believe the primary risk to liquidity is the potential decrease in demand for our products and services. Historically, this demand has been influenced by the ISR needs of the United States Government.

We believe that the funds generated from operations, existing working capital, and the amount available under our existing line of credit will be sufficient to meet our cash needs for the next twelve months.

### **Borrowing Arrangements**

***Revolving line of credit.*** At October 31, 2008, we had a revolving line of credit (Line of Credit) under which Wells Fargo Bank (Wells Fargo) could advance funds to us, up to a maximum principal amount of \$3 million. The Line of Credit was renewed on February 21, 2008, and it will expire on March 1, 2009.

At October 31, 2008, we had three standby letters of credit under the Line of Credit totaling approximately \$1,407,000. One letter of credit, related to our Sunnyvale, California, facilities lease, had a committed balance of approximately \$1,221,000 at October 31, 2008. The second letter of credit was a requirement of our workers compensation insurance, and had a committed balance of approximately \$150,000 at October 31, 2008. The third letter of credit, a requirement of one of our customers, had a committed balance of \$36,000. We do not pay interest on the amounts associated with the standby letters of credit.

As a result of the committed but unused funds associated with the three letters of credit, the total amount under the Line of Credit available for borrowing was approximately \$1,593,000. No fees or interest were associated with this unused portion. Borrowings under the Line of Credit bear interest at Wells Fargo's reference rate (4% at October 31, 2008), and interest on those borrowings is payable monthly. As security for our indebtedness under the Line of Credit, we have granted to Wells Fargo a security interest in our cash and marketable securities maintained with an affiliate of Wells Fargo.

***Term loan and interest rate swap.*** Effective July 1, 2005, and in connection with the acquisition of Dynamics Technology, Inc. (DTI), we entered into a term loan with Wells Fargo, in the principal amount of \$10 million, plus interest, the proceeds of which were used for acquisition financing (Term Loan). The Term Loan bears interest at a rate per annum equal to 1.750% above the London Inter-Bank Offered Rate (LIBOR) (4.00% at October 31, 2008). Our Term Loan is for a seven-year term ending on July 1, 2012. The loan terms require us to make monthly payments of principal and interest.

As security for our indebtedness under the Term Loan, we have granted to Wells Fargo a security interest in our accounts receivable, general intangibles, inventory, and equipment.

We are required to maintain certain financial covenants setting forth minimum ratios for quick ratio and fixed charge coverage and maximum ratios for total liabilities to tangible net worth. As of October 31, 2008, we were in compliance with these covenants.

We are exposed to market risk from changes in interest rates on the Term Loan, and manage this exposure by using an interest rate swap agreement with Wells Fargo, which is designated as a cash-flow hedge. By locking in a fixed rate for the entire term of the loan, this strategy decreases the variability of earnings and cash flows resulting from interest rate fluctuations and lowers the overall borrowing costs should interest rates rise. The interest rate swap is designated as a cash flow hedge and is accounted for under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133). No losses on the agreement due to counterparty credit issues are anticipated. Under this swap, we pay a fixed interest rate of 4.33% over the seven-year term of the loan and receive an average floating rate of LIBOR on the notional amount of the loan. The combined interest amounts on the Term Loan and the swap reflect our total monthly interest obligation, which is fixed at 6.08%.

The effective portion of the cash flow hedge is reported as other comprehensive income and reclassified into earnings in the same period during which the hedged transaction affects earnings. At October 31, 2008, the effective portion of the cash flow hedge was a deferred loss of approximately \$78,000, net of taxes. Over the next twelve months, we expect to reclassify approximately \$93,000 of the loss to interest expense as principal on the Term Loan is repaid and the related swap-instrument notional amount is reduced.

We assess effectiveness of the hedge instrument regularly. The ineffective portion of the gain or loss, if there is one, would impact earnings as it occurs. There is no ineffective portion of the outstanding swap as of October 31, 2008.

### Contractual Obligations

The following table sets forth our contractual obligations as of October 31, 2008 (in thousands).

Fiscal Year	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating lease obligations	\$36,052	\$7,550	\$14,100	\$7,678	\$6,724
Loan obligations – principal	5,357	1,429	2,857	1,071	—
Loan obligations – interest	603	281	300	22	—
Purchase obligations	5,228	5,228	—	—	—
Total	\$47,240	\$14,488	\$17,257	\$8,771	\$6,724

Our operating lease obligations consist of non-cancelable lease agreements for our facilities, which expire at various dates between fiscal years 2009 and 2016. Certain leases contain escalation clauses and requirements for the payment of property taxes, insurance, and maintenance expenses. During the first quarter of fiscal year 2008, approximately \$998,000 of the cost for our leasehold improvements was funded by the landlord of our new facility in Torrance, California. This was determined to be a lease incentive. This lease incentive reduces our rent expense and will be amortized on a straight-line basis over the remaining period of our operating lease that ends in fiscal year 2015. This reduction to rent expense is generally equal to the increased amortization expense of the associated leasehold improvements.

We do not have any off-balance sheet arrangements with unconsolidated entities or related parties, and, accordingly, our liquidity and capital resources are not subject to off-balance sheet risks from unconsolidated entities.

**Product warranties.** Our products are warranted against defective workmanship and materials for a period of one year from the date of acceptance by the original purchaser. Warranty costs were approximately \$181,000, \$306,000, and \$279,000 for fiscal years 2008, 2007, and 2006, respectively.

### Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS 157, *Fair Value Measurement*. SFAS 157 defines fair value, establishes a framework for measuring fair value, and enhances disclosures about fair value measurements. FSP 157-2, *Effective Date of FASB Statement No. 157*, delays the effective date of SFAS 157 for one year for all non-financial assets and non-financial liabilities, except for those items that are recognized or disclosed at fair value on a recurring basis. The measurement and disclosure requirements of SFAS 157 related to financial assets and financial liabilities will be effective for the first quarter of our fiscal year beginning November 1, 2008. We believe that the adoption of SFAS 157 for financial assets and financial liabilities will not have a material impact on our financial position, results of operations, or cash flows. We are evaluating the impact SFAS 157 will have on our financial statements when we apply it to non-financial assets and non-financial liabilities beginning in the first quarter of our fiscal year beginning November 1, 2009.

In February 2007, the FASB issued SFAS 159, *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS 159 provides companies with an option to report selected financial assets and liabilities at fair value. It also establishes presentation and disclosure requirements to facilitate comparisons between companies using different measurement attributes for similar types of assets and liabilities. The statement will be effective for our fiscal year beginning November 1, 2008. We believe that the adoption of SFAS 159 will not have a material impact on our financial position, results of operations, or cash flows.

In June 2007, the FASB ratified Emerging Issues Task Force (EITF) Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities* (EITF 07-3). EITF 07-3 requires non-refundable advance payments for goods, services to be used in future research, and development activities to be recorded as an asset, with the payments expensed when the research and development activities are performed. EITF 07-3 applies to new contractual arrangements we enter into in our fiscal year beginning November 1, 2008. We believe that adoption of EITF 07-3 will not have a material effect on our financial position, results of operations, or cash flows.

In December 2007, the FASB issued SFAS 141R, *Business Combinations*. SFAS 141R replaces SFAS 141. The statement retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting. It changes the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process research and development at fair value, and requires the expensing of acquisition-related costs as incurred. The statement will apply prospectively to business combinations occurring in our fiscal year beginning November 1, 2009. We are evaluating the impact adopting SFAS 141R will have on our financial statements.

In March 2008, the FASB issued SFAS 161, *Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133*. SFAS 161 requires enhanced disclosures about derivatives on a quarterly basis, including qualitative disclosures about objectives and strategies for using derivatives, and quantitative disclosures about the fair value of derivatives, as well as gains and losses on derivative instruments. It also requires disclosures about the volume of derivative activity and credit-risk-related contingent features in derivative agreements. SFAS 161 does not change the accounting treatment for derivative instruments, and therefore, the adoption will not have any impact on our financial position, results of operations, or cash flows. SFAS 161 is effective for the first quarter of our fiscal year beginning November 1, 2009.

In June 2008, the FASB issued FSP EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities*. FSP EITF 03-6-1 clarifies that share-based payment awards that entitle their holders of unvested awards to receive non-forfeitable dividends or dividend equivalents should be considered participating securities. We have some grants of restricted stock that contain non-forfeitable rights to dividends and will be considered participating securities once we adopt FSP EITF 03-6-1. As participating securities, we will be required to include these instruments in the calculation of earnings per share (EPS) using the “two-class method.” The two-class method of computing EPS is an earnings allocation formula that determines EPS for each class of common stock and participating security according to dividends declared and participation rights in undistributed earnings. FSP EITF 03-6-1 is effective for the first quarter of our fiscal year beginning November 1, 2009. We are currently evaluating the potential impact, if any, the adoption of FSP EITF 03-6-1 could have on our calculation of EPS.

## Quarterly Results

The following table sets forth certain unaudited quarterly consolidated financial data for the eight quarters ending October 31, 2008. In the opinion of management, the unaudited information set forth below has been prepared on the same basis as the audited information and includes all adjustments necessary to present fairly the information set forth herein. The operating results for any quarter are not indicative of results for any future period. All data is in thousands except for common share and per common share data.

	2007					2008				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Revenues from contracts	\$43,297	\$40,682	\$39,206	\$45,660	\$168,845	\$41,610	\$43,888	\$48,695	\$46,955	\$181,147
Revenues from royalty agreements	247	372	336	575	1,530	1,115	1,396	1,253	1,419	5,184
Total revenues	\$43,544	\$41,054	\$39,542	\$46,235	\$170,375	\$42,725	\$45,284	\$49,948	\$48,374	\$186,331
Operating expenses:										
Contract costs	28,860	28,583	27,062	31,628	116,133	29,371	31,492	34,572	34,400	129,835
Research and development	3,585	3,410	3,756	3,453	14,204	2,979	3,554	3,953	2,630	13,116
General and administrative	7,959	6,585	7,101	7,089	28,734	7,995	7,403	8,205	6,990	30,593
Total operating expenses	40,404	38,578	37,919	42,170	159,071	40,345	42,449	46,730	44,020	173,544
Operating income	3,140	2,476	1,623	4,065	11,304	2,380	2,835	3,218	4,354	12,787
Interest income (expense), net	160	105	189	229	683	233	147	158	223	761
Income before provision (benefit) for income taxes	3,300	2,581	1,812	4,294	11,987	2,613	2,982	3,376	4,577	13,458
Provision (benefit) for income taxes	1,437	1,001	835	1,902	5,175	1,125	967	1,411	2,028	5,531
Net income	\$1,863	\$1,580	\$977	\$2,392	\$6,812	\$1,488	\$2,015	\$1,965	\$2,549	\$8,017
Net income, per common share										
Basic	\$0.16	\$0.13	\$0.08	\$0.20	\$0.56	\$0.12	\$0.16	\$0.16	\$0.20	\$0.64
Diluted	\$0.15	\$0.13	\$0.08	\$0.19	\$0.55	\$0.12	\$0.16	\$0.15	\$0.20	\$0.63
Number of shares used in calculating net income per common share										
Basic	11,973	12,039	12,171	12,218	12,100	12,344	12,400	12,538	12,622	12,475
Diluted	12,171	12,285	12,381	12,397	12,314	12,517	12,523	12,741	12,844	12,681

At times, we have experienced fluctuations in our quarterly results. Management believes that these fluctuations are an inherent part of the business and could continue into the future. These have included costs associated with uneven flows of incoming material, the level of R&D spending during any given quarter, the use of target indirect rates at interim reporting periods, fee recognition on development contracts in the early phases of contract performance where the financial risk is not entirely known until the contract is further along in the development cycle, the United States Government contracting and budget cycles, the timing of contract awards, and changes in estimates that impact our effective tax rate.

## Item 7A: Quantitative and Qualitative Disclosures about Market Risk

**Interest rate risk.** Our interest income is sensitive to changes in the general level of United States interest rates. At October 31, 2008, our short-term and long-term securities consisted of municipal securities. Substantially all of our investments in the municipal securities are with A-1/SP-1/AAA (Standard & Poor's), P-1/MIG-1/Aaa (Moody's), and F-1/AA/AAA (Fitch) rated issuers. Our investment policy prohibits our investment in auction rate securities, mortgage-backed securities, and asset-backed securities. Insured municipal notes or bonds are also prohibited, with the exception of daily and weekly variable rate demand notes that contain a hard put feature.

The average days to maturity of our investment portfolio is 140 days, as of October 31, 2008. Due to the short-term nature of these cash investments and the ability to liquidate our investment portfolio, we do not believe that there is a material interest rate risk associated with the current credit environment.

As of October 31, 2008, our total cash and investments balance that was sensitive to interest rate risk was approximately \$59,094,000. As a measurement of the sensitivity of our portfolio, if yields were to fluctuate by 100 basis points, the total effect to the investment portfolio balance would be approximately \$210,000.

The following table summarizes our cash and cash equivalents, and short-term securities, at fair value, that are sensitive to interest rate risk (in thousands).

	2008	2007
Cash and cash equivalents	\$4,668	\$5,250
Available-for-sale securities:		
Short-term tax-exempt	45,045	29,683
Long-term tax-exempt	9,381	4,114
	<u>\$59,094</u>	<u>\$39,047</u>

**Term loan and interest rate swap.** Effective July 1, 2005, and in connection with the acquisition of DTI, we entered into a Term Loan agreement in the principal amount of \$10 million with Wells Fargo, the proceeds of which were used for acquisition financing. The Term Loan bears interest at an annual rate of 1.75% above LIBOR (4.00% at October 31, 2008).

We manage potential market risk from changes in interest rates on the Term Loan through the use of an interest rate swap agreement designated as a cash flow hedge. By locking in a fixed rate for the entire term of the loan, this strategy decreases the variability of earnings and cash flows resulting from interest rate fluctuations and lowers our overall borrowing costs should interest rates rise.

Coincident with the Term Loan transaction, we also entered into an interest rate swap agreement with Wells Fargo whereby we pay interest to Wells Fargo at a fixed rate of 4.33% and Wells Fargo pays interest to us at a floating rate tied to the LIBOR index. The combined interest amounts on the Term Loan and the swap reflect our total monthly interest obligation, which is locked in at 6.08%.

## **Item 8: Consolidated Financial Statements and Supplementary Data**

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### **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders of  
Applied Signal Technology, Inc.

We have audited the accompanying consolidated balance sheets of Applied Signal Technology, Inc. as of October 31, 2008, and 2007, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended October 31, 2008. These financial statements are the responsibility of Applied Signal Technology, Inc.'s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Applied Signal Technology, Inc. at October 31, 2008, and 2007, and the consolidated results of its operations and its cash flows for each of the three years in the period ended October 31, 2008, in conformity with United States generally accepted accounting principles.

As discussed in Note 7 to the Notes to Consolidated Financial Statements, Applied Signal Technology, Inc. changed its method of accounting for uncertain tax positions as of November 1, 2007.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Applied Signal Technology, Inc.'s internal control over financial reporting as of October 31, 2008, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated January 8, 2009, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Jose, California  
January 8, 2009

## **Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting**

The Board of Directors and Shareholders of  
Applied Signal Technology, Inc.

We have audited Applied Signal Technology, Inc.'s internal control over financial reporting as of October 31, 2008, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Applied Signal Technology, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting in Item 9A. Our responsibility is to express an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Applied Signal Technology, Inc. maintained, in all material respects, effective internal control over financial reporting as of October 31, 2008, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Applied Signal Technology, Inc. as of October 31, 2008, and 2007, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended October 31, 2008, and our report dated January 8, 2009, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Jose, California  
January 8, 2009

**Consolidated Statements of Operations**  
(in thousands, except per share data)

	<b>Year Ended October 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
Revenues from contracts	\$181,147	\$168,845	\$161,193
Revenues from royalty agreements	5,184	1,530	720
Total revenues	\$186,331	\$170,375	\$161,913
Operating expenses:			
Contract costs	129,835	116,133	107,898
Research and development	13,116	14,204	19,165
General and administrative	30,593	28,734	25,978
Total operating expenses	173,544	159,071	153,041
Operating income	12,787	11,304	8,872
Interest income and other, net	1,296	1,356	1,024
Interest expense	(535)	(673)	(709)
Income before provision for income taxes	13,548	11,987	9,187
Provision for income taxes	5,531	5,175	4,860
Net income	\$8,017	\$6,812	\$4,327
Net income per common share			
Basic	\$0.64	\$0.56	\$0.37
Diluted	\$0.63	\$0.55	\$0.36
Number of shares used in calculating net income per common share			
Basic	12,475	12,100	11,739
Diluted	12,681	12,314	11,994

*See accompanying notes.*

**Consolidated Balance Sheets**  
(in thousands)

	<b>October 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$4,668	\$5,250
Short-term investments	45,045	29,683
Total cash, cash equivalents, and short-term investments	49,713	34,933
Accounts receivable:		
Billed	22,224	25,097
Unbilled	17,891	19,379
Total accounts receivable	40,115	44,476
Inventory	8,141	5,944
Refundable income taxes	—	647
Prepaid and other current assets	10,155	9,760
Total current assets	108,124	95,760
Property and equipment, at cost:		
Machinery and equipment	43,146	41,075
Furniture and fixtures	4,737	4,676
Leasehold improvements	17,537	14,584
Construction in process	353	2,230
	65,773	62,565
Accumulated depreciation and amortization	(50,660)	(46,096)
Property and equipment, net	15,113	16,469
Long-term investment	9,381	4,114
Goodwill	19,964	19,964
Intangible assets, net of accumulated amortization	162	616
Long-term deferred tax asset	4,410	5,021
Other assets	865	789
Total assets	\$158,019	\$142,733

**Consolidated Balance Sheets (continued)**  
(in thousands)

	<b>October 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Accounts payable	\$5,687	\$3,848
Accrued payroll and related benefits	14,383	13,135
Note payable	1,429	1,429
Income taxes payable	498	14
Other accrued liabilities	3,513	1,997
Total current liabilities	25,510	20,423
Long-term note payable	3,929	5,357
Accrued rent	2,396	1,658
Other long-term liabilities	1,451	459
Shareholders' equity:		
Preferred stock, no par value: 2,000,000 shares authorized; none issued and outstanding	—	—
Common stock, no par value: 20,000,000 shares authorized; issued and outstanding shares – 12,822,323 at October 31, 2008, and 12,388,422 at October 31, 2007	70,145	61,849
Retained earnings	54,626	52,953
Accumulated comprehensive income	(38)	34
Total shareholders' equity	124,733	114,836
Total liabilities and shareholders' equity	\$158,019	\$142,733

*See accompanying notes.*

**Consolidated Statements of Cash Flows**  
(in thousands)

	Year Ended October 31,		
	2008	2007	2006
Operating activities:			
Net income	\$8,017	\$6,812	\$4,327
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	6,138	5,649	5,279
Stock-based compensation	4,779	4,150	4,283
Excess tax benefits from stock-based payment arrangements	(37)	(54)	(180)
Changes in:			
Accounts receivable	4,361	(3,897)	7,887
Income tax receivable	752	—	513
Inventory, prepaid expenses and other current assets	(2,697)	2,680	(7,867)
Other assets	519	380	317
Accrued lease incentives	877	—	—
Accounts payable and accrued liabilities	5,454	(1,565)	(3,772)
Net cash provided by operating activities	28,163	14,155	10,787
Investing activities:			
Purchases of available-for-sale securities	(109,964)	(76,411)	(77,853)
Maturities of available-for-sale securities	88,935	70,877	60,000
Additions to property and equipment	(3,800)	(4,451)	(5,037)
Net used in investing activities	(24,829)	(9,985)	(22,890)
Financing activities:			
Issuances of common stock	4,044	4,394	4,484
Shares repurchased for tax withholding of vested restricted stock awards	(279)	(59)	—
Excess tax benefits from stock-based payment arrangements	37	54	180
Term loan	(1,428)	(1,429)	(1,429)
Dividends paid	(6,290)	(6,074)	(5,858)
Net cash (used in) financing activities	(3,916)	(3,114)	(2,623)
Net increase (decrease) in cash and cash equivalents	(582)	1,056	(14,726)
Cash and cash equivalents at beginning of year	5,250	4,194	18,920
Cash and cash equivalents at end of year	\$4,668	\$5,250	\$4,194
Supplemental disclosure of cash flow information:			
Interest paid	\$382	\$556	\$586
Income taxes paid	\$7,005	\$3,873	\$5,997

See accompanying notes.

**Consolidated Statement of Shareholders' Equity**

(in thousands, except share data)

	Number of Outstanding Shares	Common Stock	Retained Earnings	Accumulated Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at October 31, 2005 (as reported)	11,528,318	\$44,149	\$53,853	\$127	\$98,129
Issuance of common shares to employees under stock compensation plans	393,785	4,484	—	—	4,484
Stock-based compensation expense	—	4,283	—	—	4,283
Dividends declared	—	—	(5,908)	—	(5,908)
Tax benefit related to stock plans	—	379	—	—	379
Other comprehensive income	—	—	—	(64)	(64)
Net income	—	—	4,327	—	4,327
Balance at October 31, 2006 (as reported)	11,922,103	\$53,295	\$52,272	\$63	\$105,630
Issuance of common shares to employees under stock compensation plans, net of repurchases	466,319	4,336	—	—	4,336
Stock-based compensation expense	—	4,150	—	—	4,150
Dividends declared	—	—	(6,131)	—	(6,131)
Tax benefit related to stock plans	—	68	—	—	68
Other comprehensive income	—	—	—	(29)	(29)
Net income	—	—	6,812	—	6,812
Balance at October 31, 2007 (as reported)	12,388,422	\$61,849	\$52,953	\$34	\$114,836
Issuance of common shares to employees under stock compensation plans, net of repurchases	433,901	3,765	—	—	3,765
Stock-based compensation expense	—	4,779	—	—	4,779
Dividends declared	—	—	(6,344)	—	(6,344)
Tax deficiency related to stock plans	—	(248)	—	—	(248)
Other comprehensive income	—	—	—	(72)	(72)
Net income	—	—	8,017	—	8,017
Balance at October 31, 2008	12,822,323	\$70,145	\$54,626	\$(38)	\$124,733

See accompanying notes.

**Note 1: Organization and Summary of Significant Accounting Policies**

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**Organization**

Applied Signal Technology, Inc. (AST) provides advanced intelligence, surveillance, and reconnaissance (ISR) solutions to enhance global security. We provide products and services for both SIGINT and sensor signature processing. Our SIGINT competencies include communications intelligence (COMINT) focusing on broadband tactical wireless networks, and electronic intelligence (ELINT). Our sensor signature expertise includes processing information from electro-optic, sonar, radar, magnetic, and chemical sensors to detect changes in the environment. We develop and manufacture sophisticated sensors and digital signal processing equipment that use advanced software.

Substantially, all of our revenues were from contracts with the United States Government or prime contractors for the United States Government.

**Estimates**

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ significantly from those estimates.

**Principles of Consolidation**

The financial statements include the accounts of AST and its wholly owned subsidiary, Dynamics Technology, Inc. (DTI). All significant intercompany transactions have been eliminated.

**Revenues and Contract Accounting**

**Revenues and cost recognition.** The majority of our contracts are accounted for in accordance with the American Institute of Certified Public Accountants (AICPA) Statement of Opinion 81-1, *Accounting for Performance of Construction-Type and Production-Type Contracts*. These contracts are executed by using written contractual arrangements, most of which require us to design, develop, manufacture, and/or modify our complex products and perform related services according to specifications provided by the customer. A limited number of standalone software contracts are recognized in accordance with the AICPA Statement of Opinion 97-2, *Software Revenue Recognition* (SOP 97-2). In accordance with SOP 97-2, we may, at times, record an amount of deferred revenue associated with contracts that are billed and for which customers have paid in advance of performance requirements set forth in these contracts.

As a supplier to the United States Government, we are required to comply with numerous regulations, including those governing security and contracting practices. Failure to comply with these procurement regulations and practices could result in fines being imposed against us or our suspension for a period of time from eligibility for bidding on, or for award of, new Government contracts. Among the causes for the suspension are violations of various statutes, including those related to procurement integrity, export control, United States Government security regulations, employment practices, protection of the environment, accuracy of records in the recording of costs, and foreign corruption. The Government may investigate and make inquiries of our business practices and conduct audits of contract performance and cost accounting. The Government audits and investigations can take several years to complete. Depending on the results of these audits and investigations, the Government may make claims against us or take exception to certain costs we determined to be recoverable. In the period management determines recoverability is not likely, reserves are established for the estimated loss by a charge to operating income.

We account for cost-reimbursement contracts by charging actual labor, materials, and other direct costs, plus estimated indirect costs of operations as incurred, including overhead, research and development, and general and administrative expenses. Stock compensation expense is generally not reimbursable under these contracts. During fiscal year 2008, we did not apply indirect costs to subcontract costs that were in excess of \$250,000 and that met certain other predetermined criteria.

We recognize contract revenues and profits on cost-reimbursement contracts by applying an estimated fee rate to all incurred costs on an individual contract basis. Fee calculations are based on either negotiated fee amounts or management's assessment of the fee amounts that are likely to be earned. On cost-reimbursement contracts, we

may bear unexpected cost increases for purposes of maintaining customer relationships. Historically, the effect on operating results and financial condition from cost-reimbursement losses has been minimal.

Our policy for recognizing interim award fees on our cost-plus-award-fee contracts is based on management's assessment as to the likelihood that the award fee or an incremental portion thereof will be earned, on a contract-by-contract basis. Management bases its assessments on numerous factors including contract terms, nature of the work to be performed, our relationship and history with the customer, our history with similar types of projects, and our current and anticipated performance on the specific contract. No award fee is recognized in whole or in part until management determines that it is probable that the award fee or portion thereof will be earned. Historically, management's estimates have generally been consistent with the actual fees awarded. However, changes in facts and circumstances could arise within an award fee period, causing management to either lower or raise the award fee estimate in the period in which the changes occur.

Our time-and-materials contracts are performed on a level-of-effort basis. We recognize revenue for these contracts by applying a negotiated billing rate to the level of effort.

We account for fixed-price contracts by using the percentage-of-completion method. Under this method, we charge labor, materials, and other direct costs, plus estimated indirect costs of operations, as they are incurred. Each period, we recognize as revenue a portion of the contract revenue, based on estimated profits and the degree of completion of the contract as measured by a comparison of the actual costs incurred and the estimated costs to complete. On fixed-price contracts, we bear the risk of any unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in material costs, inefficiencies, or other factors, and these costs could have a materially adverse affect on our results of operations and results of operations.

We have one licensing agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize. Royalties contributed approximately \$5,184,000, \$1,530,000, and \$720,000 to revenues and operating income during fiscal years 2008, 2007, and 2006, respectively.

The following table represents our revenue concentration during the respective periods by contract type.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Cost-reimbursement contracts	69%	71%	79%
Fixed-price contracts	10%	14%	17%
Time-and-materials contracts	18%	14%	4%
Royalty contracts	3%	1%	—
	<u>100%</u>	<u>100%</u>	<u>100%</u>

a dash (—) designates less than 1% revenue concentration

The following table represents the revenue concentration from significant contracts during the respective periods. Due to security requirements of the United States Government, we are unable to disclose the actual contract names. Therefore, for the ease of the reader, we have renamed these contracts for reporting purposes in the table below.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
ASA	15%	9%	—
High Beam	15%	—	—
Tiffany	13%	15%	5%
Stone Face II	12%	12%	5%
Specter	5%	14%	17%
Stone Face I	—	—	9%
Simple Edge	—	—	7%
	<u>60%</u>	<u>50%</u>	<u>43%</u>

a dash (—) designates less than 5% revenue concentration

The following contracts were indefinite-delivery-indefinite-quantity (IDIQ) contracts: ASA, Tiffany, Stone Face II, Stone Face I, and Simple Edge. Under the terms of this type of contract, the Government may issue individual delivery orders (DOs) for goods or services that they require. Each DO is treated as a separate contract, which may be awarded on a cost-reimbursable, fixed-price, or time-and-materials basis. We aggregate the DOs under each IDIQ contract for purposes of distinguishing significant revenue concentrations.

ASA is a time-and-materials contract, which significantly increased the revenue concentration of time-and-materials contracts during fiscal year 2008 and 2007. All of the other contracts referenced were cost-reimbursement contracts.

For those contracts in which all of the terms have not yet been finalized, revenue does not include an estimated fee rate on cost.

Management reviews contract performance, costs incurred, and estimated completion costs regularly. We adjust revenues and profits on all contracts in the period in which changes, including anticipated losses, become determinable.

Precontract costs represent costs incurred in anticipation of specific expected future contract awards and costs incurred in connection with ongoing contracts for which contract modifications have not been defined or completed at the end of the reporting period. These costs are included in other current assets on the balance sheet. Precontract costs for the periods ending October 31, 2008, and October 31, 2007, were approximately \$1,283,000 and \$4,465,000, respectively. Approximately \$4,113,000 of the October 31, 2007, balance was recognized as revenues during fiscal year 2008.

**Indirect rate variance adjustments to operations.** We record contract revenues and costs of operations for interim reporting purposes based on annual targeted indirect rates. At year-end, the revenues and costs are adjusted for actual indirect rates. During our interim reporting periods, variances may accumulate between the actual indirect rates and the annual targeted rates. All timing-related indirect spending variances are removed from contract costs, research and development, and general and administrative expenses, and are included in inventory as part of work in process during these interim reporting periods. These rates are reviewed regularly, and we record adjustments for any material, permanent variances in the period they become estimable.

Our accounting policy for recording indirect rate variances is based on management's belief that variances accumulated during interim reporting periods will be absorbed by expected contract activities during the remainder of the year. We consider the rate variance to be unfavorable when our actual indirect rates are greater than our annual targeted rates. In contrast, a favorable rate variance occurs when our actual indirect rates are lower than our annual targeted rates. During interim reporting periods, unfavorable rate variances are recorded as reductions to operating expenses and increases to work in process inventory. Favorable rate variances are recorded as increases to operating expenses and decreases to work in process inventory.

If we anticipate that actual contract activities will be different than planned levels, there are alternatives we can utilize to absorb the variance: we can adjust our planned indirect spending during the year, we can modify our billing rates to our customers through the Defense Contract Audit Agency in accordance with Federal Acquisition Regulations, or we can record adjustments to expense based on estimates of future contract activities for the remainder of the fiscal year.

If our rate variance is unfavorable, the modification of our billing rates will likely increase revenue and operating expenses, and decrease the unfavorable indirect rate variance accumulated in inventory. Fee percentages on fixed-price and time-and-materials contracts will generally decline as a result of any increase to indirect costs. Fee percentages on active cost-reimbursable contracts will generally be unaffected as a result of any increase to indirect costs. Fee percentages on completed cost-reimbursable contracts will generally be reduced. If our rate variance is favorable, the modification of our billing rates will decrease revenue and operating expenses, and decrease the favorable indirect rate variance accumulated in inventory. In this event, fee percentages on fixed-price and time-and-materials contracts will generally increase. Fee percentages on cost-reimbursable contracts will generally be unaffected as a result of any reduction to indirect costs, due to the fact that programs will typically expend all of the funds available. Any impact on operating income, however, will depend on a number of other factors, including mix of contract types, contract terms, anticipated performance on specific contracts, and anticipated changes in inventory.

At the end of fiscal year 2008, we absorbed a favorable indirect rate variance that accumulated during the fiscal year by modifying our billing rates to our customers. Consequently, we decreased revenues by approximately \$1,657,000 and operating expenses by approximately \$1,243,000.

During fiscal year 2007, we absorbed an unfavorable indirect rate variance that accumulated during the fiscal year by modifying our billing rates to our customers, which increased revenues by approximately \$958,000 and operating expenses by approximately \$2,224,000.

During fiscal year 2006, we absorbed an unfavorable indirect rate variance that accumulated during the fiscal year by modifying our billing rates to our customers, which increased revenues by approximately \$3,387,000 and operating expenses by approximately \$5,725,000.

**Accounts receivable and allowance for bad debt.** Accounts receivable are segregated between billed and unbilled accounts. For cost-reimbursement contracts, we bill incurred costs and a portion of our fees on a regular basis. Under fixed-price contracts, we either regularly progress bill 90% of incurred costs or bill contract costs on a milestone or unit of delivery basis. Unbilled amounts result from our recognition of contract revenue in advance of contractual billing or progress billing terms.

When evaluating our need for a bad debt allowance, we consider our customer base and their payment history. The majority of our revenues are generated from the United States Government, and therefore credit risk is minimal. We record allowances for bad debt as a reduction to accounts receivable and an increase to bad debt expense. These allowances are recorded in the period a specific collection problem is identified. Once the receivable is deemed uncollectible, the allowance is reversed and the receivable is written off to bad debt expense. Charges to bad debt expense were not significant during fiscal years 2008, 2007, and 2006.

**Inventory valuation and disposal.** Typical life cycles of our products are eight to ten years or more. In addition, we maintain spare parts in order to repair the equipment. We evaluate our inventory quarterly at interim reporting periods, and assess our ability to sell our products, which include raw materials. Historically, we have sold our inventory at or above cost, so there was typically no decrement in valuation. When we determine that a product has reached the end of its life cycle or there is no longer a need for a certain product, typically, we will dispose of any remaining inventory, and record the associated reduction to inventory.

We recorded a write-down of approximately \$1,329,000 during fiscal year 2008 to reflect the estimated market value of one class of our inventoried products; these charges were included in contract costs in our statement of operations. Disposals associated with our raw material represent a minor amount and is included in general and administrative expenses on the statement of operations due to the fact that raw materials could be used in a variety of situations other than contract costs, including R&D. During fiscal year 2008, disposals of obsolete products amounted to approximately \$251,000. Inventory activities during fiscal year 2007 included a write-down of approximately \$415,000 and disposals of obsolete products of approximately \$187,000.

## **Income Taxes**

**Income taxes.** We estimate our income taxes in each of the taxing jurisdictions in which we operate. Our effective tax rate can differ from the statutory rate primarily due to the non-tax-deductible nature of certain types of stock-based compensation expense. In addition, our process involves estimating our current tax expense together with assessing any temporary differences resulting from the different treatment of certain items, such as the timing for recognizing certain expenses, for tax and accounting purposes. These differences may result in deferred tax assets and liabilities, which are included in our consolidated balance sheet. We are required to assess the likelihood that our deferred tax assets, which include net operating loss carryforwards and temporary differences that are expected to be deductible in future years, will be recoverable from future taxable income or other tax planning strategies. If recovery is not likely, we have to provide a valuation allowance based on our estimates of future taxable income in the various taxing jurisdictions, and the amount of deferred taxes that are ultimately realizable. The provision for current and deferred taxes involves evaluations and judgments of uncertainties in the interpretation of complex tax regulations by various taxing authorities. Actual results could differ from our estimates.

We also recognize the impact of an uncertain income tax position on the income tax return at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority according to Financial Interpretation No. 48, *Accounting for Uncertainty in Income Taxes - an interpretation of FASB Statement No. 109*. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained.

Please refer to "Notes to Consolidated Financial Statements, Note 7: Income Taxes" for further information.

## **Price Redetermination**

As a Government contractor, we are subject to price redetermination on certain fixed-price contracts if it is determined that we did not price our products and services consistent with the requirements of the Federal

Acquisition Regulations. We did not incur any price redeterminations on any of our contracts during fiscal years 2008, 2007, or 2006.

### Cash, Cash Equivalents, and Investments

We consider all highly liquid debt instruments purchased with an original maturity date of three months or less to be cash equivalents.

Our remaining securities are classified as available for sale and are carried at fair market value in short-term and long-term investments. At October 31, 2008, all of our short-term and long-term investments consist of tax-exempt securities. At the time of purchase, management determines the appropriate classification of these securities and re-evaluates such designation as of each balance sheet date. Unrealized gains and losses, net of tax, are reported in shareholders' equity as part of comprehensive income. The cost of securities sold is based on the specific identification method. The fair value of short-term and long-term investments is determined based on either quoted market prices for certain securities, or based on observable inputs either directly or indirectly related to the specific security or asset class. Realized gains and losses on sales of available-for-sale securities were not material for fiscal years 2008, 2007, and 2006.

The following tables summarize our cash and cash equivalents, short-term securities, and long-term securities (in thousands).

	October 31, 2008			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Market Value
Cash and cash equivalents	\$4,668	\$—		\$4,668
Available-for-sale securities:				
Short-term tax exempt	45,006	39		45,045
Long-term tax exempt	9,380	10	(9)	9,381
	\$59,054	\$49	\$(9)	\$59,094

	October 31, 2007		
	Amortized Cost	Gross Unrealized Gains	Estimated Fair Market Value
Cash and cash equivalents	\$5,250	\$—	\$5,250
Available-for-sale securities:			
Short-term tax exempt	29,671	12	29,683
Long-term tax exempt	4,108	6	4,114
	<u>\$39,029</u>	<u>\$18</u>	<u>\$39,047</u>

The following table summarizes the maturities of our available-for-sale investments (in thousands).

	October 31, 2008	October 31, 2007
Due in one year or less	\$45,045	\$29,683
Due in one to two years	9,381	4,114
	<u>\$54,426</u>	<u>\$33,797</u>

### **Restricted Cash**

We had restricted cash balances of approximately \$605,000 and \$562,000 at October 31, 2008, and October 31, 2007, respectively. These balances include contributions made by our employees residing in California for disability funds. These contributions were paid in lieu of participating in the state-sponsored disability program.

Approximately \$161,000 and \$194,000 was included in prepaids and other current assets on October 31, 2008, and October 31, 2007, respectively. Approximately \$444,000 and \$368,000 was included in other assets on October 31, 2008, and October 31, 2007, respectively.

### **Property and Equipment**

Machinery and equipment as well as furniture and fixtures are depreciated by using the straight-line method over the estimated useful lives of the assets, ranging up to five years. Leasehold improvements are amortized by using the straight-line method over the lesser of the useful life of the assets or the lease term. Construction in process includes costs incurred to build leasehold improvements and test equipment that has not yet been placed into service.

### **Goodwill and Long-Lived Asset Valuation**

**Goodwill valuation.** We test goodwill for possible impairment on an annual basis and at any other time if events occur or circumstances indicate that the current carrying amount of goodwill may not be recoverable. Circumstances that could trigger an impairment test include, but are not limited to, a significant adverse change in the business climate or legal factors, an adverse action or assessment by a regulator, unanticipated competition and loss of key personnel.

To perform the goodwill impairment test, we determine the fair value of the reporting unit and compare the fair value to the reporting unit's carrying value. We believe AST is one reporting unit, and therefore, we compare the fair value of AST to the total net asset value on our balance sheet. If our total net asset value were to exceed our fair value, we would perform the second step of the impairment test. In the second step, we would compare the implied fair value of our goodwill to our carrying amount. If no impairment exists under step one, then step two is not necessary.

Based on our analysis, we concluded no impairment existed at October 31, 2008.

**Long-lived asset valuation (property, plant and equipment, and intangible assets).** We test long-lived assets or asset groups for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances that could trigger a review include, but are not limited to, significant decreases in the market price of the asset, significant adverse changes in the business climate or legal factors, accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset, current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset, and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.

We assess recoverability based on the carrying amount of the asset and its fair value, which is generally determined based on the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the asset. We recognize an impairment loss when the carrying amount is not recoverable and exceeds fair value.

Based on our analysis, no impairment was indicated at October 31, 2008 under the provisions of SFAS No. 142, *Goodwill and Other Intangible Assets*.

### Net Income Per Share Data

Basic net income per share is determined by dividing net income by the weighted average number of common shares outstanding during the period. Diluted net income per share is determined by dividing net income by the weighted average number of common shares used in the basic earnings per share calculation, plus the number of common shares that would be issued assuming conversion of all potentially dilutive securities outstanding under the treasury stock method. Per share data is as follows (in thousands, except per share amounts).

	Year Ended October 31,		
	2008	2007	2006
Numerator:			
Net income	\$8,017	\$6,812	\$4,327
Denominator:			
Shares used to compute net income per common share – basic	12,475	12,100	11,739
Effect of dilutive stock options and non-vested shares	206	214	255
Shares used to compute net income per common share – diluted	12,681	12,314	11,994
Net income per common share – basic	\$0.64	\$0.56	\$0.37
Net income per common share – diluted	\$0.63	\$0.55	\$0.36

We excluded approximately 886,000, 971,000, and 860,000 potential common shares for fiscal years 2008, 2007, and 2006 from the diluted net income per common share computation for the respective periods, as their effect would be antidilutive.

### Comprehensive Income

The components of our annual comprehensive income, net of tax, are as follows (in thousands).

	Year Ended October 31,		
	2008	2007	2006
Net income	\$8,017	\$6,812	\$4,327
Unrealized gain on securities	22	17	6
Unrealized loss on derivative	(94)	(46)	(70)
Comprehensive income	\$7,945	\$6,783	\$4,263

The balance of accumulated comprehensive income on securities as of October 31, 2008, and October 31, 2007, was approximately \$40,000 and \$18,000, respectively. Derivative-related accumulated comprehensive loss balance as of October 31, 2008, was approximately \$78,000, and as of October 31, 2007, the derivative-related accumulated balance was a gain of approximately \$16,000.

### Dividends

We pay dividends at the rate of \$0.50 per share per annum, payable quarterly. However, the dividend is subject to approval by the Board of Directors and is reviewed quarterly.

Total dividends paid during fiscal years 2008, 2007, and 2006 were approximately \$6,290,000, \$6,074,000, and \$5,858,000, respectively.

At October 31, 2008, and October 31, 2007, accrued dividends of approximately \$1,603,000 and \$1,549,000, respectively, were included in other accrued liabilities on the accompanying balance sheet.

## Stock-Based Compensation

We have the following stock-based compensation programs that provide our Board of Directors discretion in creating employee equity incentives. As of October 31, 2008, there was a total of 1,023,462 shares reserved for future issuance under all of our equity incentive plans and our ESPP.

**Employee Stock Purchase Plan.** We maintain our 1993 Employee Stock Purchase Plan (ESPP), and have reserved 4,900,000 shares of common stock for issuance to employees under the ESPP. The ESPP was adopted by the Board of Directors on January 22, 1993, and approved by the shareholders on February 22, 1993. During fiscal year 2008, eligible employees purchased common stock through payroll deductions (which cannot exceed 10% of any employee's compensation) at 85% of the lower of its fair market value at the beginning of an offering period or the end of a six-month purchase period. For offering periods beginning prior to June 1, 2007, our ESPP had a twenty-four month offering period with four six-month purchase periods within each offering period. If the fair market value on the purchase date was lower than the fair market value on the offering date, all participants were withdrawn from the offering period and re-enrolled into a new offering period. Effective, May 31, 2007, we modified our ESPP such that the length of all offering periods, beginning June 1, 2007, is six months. Consequently, there is no reset feature associated with the new offering periods. As a result of the modification to the ESPP, the December 1, 2006 offering period, originally scheduled to end on November 30, 2008, was the final twenty-four month offering. On August 20, 2008, the Board of Directors increased the purchase price and eliminated the look-back provision for offering periods beginning on or after December 1, 2008. The purchase price for participants will be 95% of the fair market value on the date of purchase, and therefore, will be prospectively non-compensatory under the provisions of SFAS 123R. As of October 31, 2008, 380,264 shares remain reserved for issuance and eligible for purchase under the 1993 Plan.

**Stock Option Plan – 1991.** Our 1991 Stock Option Plan (1991 Plan) provided for the granting of incentive stock options and non-qualified stock options to our employees, directors, and consultants at exercise prices ranging from 85% to 110% (depending on the type of grant) of the fair market value of the common stock on the date of grant. The exercise price of the options granted under this plan were 100% or greater than the fair market value on the date of grant. Some options are exercisable only at the end of a two-year vesting period and some options are exercisable at the rate of 20% per year over five years. The 1991 Plan expired on January 19, 2001, and all remaining shares reserved for issuance expired. Options to purchase an aggregate of 125,409 shares of our common stock remain outstanding under the 1991 Plan as of October 31, 2008.

**Stock Option Plan – 2000.** Our 2000 Stock Option Plan (2000 Plan) was adopted by the Board of Directors on May 11, 2000, and provided for the granting of non-qualified stock options to our employees and consultants at exercise prices ranging from 85% to 100% of the fair market value of the common stock on the date of grant. Options granted prior to 2004 vest over five years, at the rate of 20%, on the first anniversary of the date of grant and in equal monthly installments over the remaining 48 months, and have a maximum term of 10 years. Options granted in 2004 through 2006 vest at the rate of 20% per year over five years, on the anniversary date of the grant date. In November 2007, the Board of Directors voted to terminate the 2000 Plan. Options to purchase an aggregate of 533,467 shares of our common stock remain outstanding under the 2000 Plan as of October 31, 2008.

**Stock Option Plan – 2001.** Our 2001 Stock Option Plan (2001 Plan) was adopted by the Board of Directors on November 16, 2000, and approved by the shareholders on March 15, 2001. The 2001 Plan provides for the granting of incentive stock options and non-qualified stock options to our employees, directors, and consultants at exercise prices ranging from 85% to 100% of the fair market value of the common stock on the date of grant. Options granted prior to 2004 vest over five years, at the rate of 20%, on the first anniversary of the date of grant and in equal monthly installments over the remaining 48 months, and have a maximum term of 10 years. Options granted in 2004 and beyond vest at the rate of 20% per year over five years, on the anniversary date of the grant date. Options to purchase an aggregate of 277,442 shares of our common stock are outstanding and 53,884 shares remain available for grant under the 2001 Plan as of October 31, 2008.

**Stock Incentive Plan – 2004.** Our 2004 Stock Incentive Plan (2004 Plan) was adopted by the Board of Directors on November 20, 2003 and approved by the shareholders on March 10, 2004. On March 14, 2008, the shareholders approved an increase of 500,000 shares to the number of shares of common stock that may be issued under the 2004 Plan. The 2004 Plan provides for the granting of incentive stock options, non-qualified stock options, restricted stock, and restricted stock unit awards to our employees, directors, and consultants. The exercise price for an option is equal to 100% of the fair market value of the common stock on the date of grant. No monetary payment is required as a condition of receiving a restricted stock or restricted stock unit award, since the consideration for the award shall be services actually rendered to us or for our benefit. Some options vest over five years, at the rate of 20%, one year after the date of grant and in equal monthly installments over the remaining 48 months, and have a maximum term of eight years. Other options vest over five years, at the rate of

20% per year. Options to purchase an aggregate of 273,000 shares of our common stock are outstanding, the common stock balance includes 175,402 shares of restricted stock, and 589,314 shares remain available for grant under the 2004 Plan as of October 31, 2008.

Prior to fiscal year 2006, we used stock options as the primary component of our stock-based incentive plans for officers, directors, and employees. In fiscal year 2006, we began granting restricted stock to our officers and directors. During 2007 and 2008, we granted restricted stock to officers and non-officer employees. The restrictions typically will lapse in four equal annual installments, on each anniversary of the grant date, conditioned on continued employment. During fiscal year 2007, we granted restricted stock to our directors, and the restrictions for the majority of the grants will lapse in three equal annual installments.

We adopted the provisions of SFAS 123 (revised 2004), *Share-Based Payment* (SFAS 123R), in fiscal year 2006, using the modified prospective transition method. Stock-based compensation expense for awards granted subsequent to November 1, 2005, was based on the grant-date fair value estimated in accordance with the provisions of SFAS 123R. For stock-based compensation awards granted prior to, but not yet vested as of November 1, 2005, stock-based compensation expense was based on the grant-date fair value previously estimated in accordance with the original provisions of SFAS 123. We recognize expense for stock-based compensation awards on a straight-line basis over the requisite service period of the award, which generally equals the vesting period of each grant.

The following table sets forth the total stock-based compensation expense resulting from stock option grants, restricted stock awards, and shares purchased under our ESPP included in our condensed consolidated statements of operations (in thousands).

	Year Ended October 31,		
	2008	2007	2006
Contract costs	\$2,747	\$2,388	\$2,493
Research and development	177	177	229
General and administrative	1,855	1,585	1,561
Stock-based compensation expense before income taxes	\$4,779	\$4,150	4,283
Income taxes	(1,029)	(850)	(804)
Stock-based compensation expense after income taxes	\$3,750	\$3,300	\$3,479
Reduction to basic net income per share	\$0.30	\$0.27	\$0.30
Reduction to diluted net income per share	\$0.30	\$0.27	\$0.29

We estimated the fair value of options granted and shares issued under our ESPP by using the Black-Scholes valuation model using the following weighted average assumptions.

	Employee Stock Options	Employee Stock Purchase Plan		
	2006	2008	2007	2006
Risk-free interest rate	5.0%	2.0%	4.6%	4.9%
Expected life (years)	5.0	0.5	1.9	1.6
Expected volatility	44%	39%	39%	39%
Expected dividends	2.8%	3.9%	2.5%	2.2%
Weighted average fair value	\$6.42	\$3.79	\$5.59	\$6.35

We did not grant options during fiscal years 2008 and 2007.

Our determination of the grant-date fair value of our ESPP using an option pricing model and the resulting compensation expense that is recognized are affected by our stock price as well as assumptions regarding a number of variables. These factors include, but are not limited to, our expected stock price volatility, the projected life, the expected dividend yield, and the risk-free interest rate. Changes in the assumptions can materially affect the estimated fair value and the expense recognized.

The risk-free interest rate is based on the Federal Reserve Bank's constant maturities daily interest rate in effect at the ESPP offering date. For our ESPP offering periods beginning prior to June 1, 2007, the expected life was based on the six-month purchase periods within each twenty-four-month offering period. Offering periods beginning after that date have a six-month purchase period and we use an expected life of six months. Our computation of expected volatility reflects a combination of historical and market-based implied volatility consistent with SFAS 123R and Staff Accounting Bulletin 107. We determined that the combination of historical and market-based implied volatility provides a more accurate reflection of our market conditions and is more representative of future stock price trends than employing solely historical volatility. The expected dividend yield is calculated by taking the total expected annual dividend payout divided by the average stock price.

Stock-based compensation expense recognized in the consolidated statement of operations reflects estimated forfeitures that are based on historical option forfeitures.

The net cash proceeds associated with our ESPP were \$3,195,000, \$3,531,000, and \$3,365,000 for fiscal years 2008, 2007, and 2006, respectively.

As of October 31, 2008, our unrecognized compensation cost related to the shares to be purchased under our ESPP was approximately \$76,000, and was expected to be recognized over the remaining 30-day period.

On November 30, 2007, the closing stock price on our ESPP purchase date was lower than the December 1, 2006, offering date, and therefore, all participants were re-enrolled into a new six-month offering period, beginning December 1, 2007, and ending May 31, 2008. This re-enrollment effectively canceled the final six-month purchase period of the original twenty-four month offering. In addition, as a result of the modification, approximately \$89,000 of incremental compensation expense was generated at December 1, 2007, and this was recognized during fiscal year 2008.

On November 30, 2006, the closing stock price on our ESPP purchase date was lower than the closing stock price on the participants' enrollment dates; therefore, 411 participants were withdrawn from their current offering period and re-enrolled into a new twenty-four month offering period beginning on December 1, 2006. Consequently, approximately \$758,000 of incremental compensation expense was added to our unrecognized compensation expense at December 1, 2006.

On May 31, 2006, the closing stock price on the ESPP purchase date was lower than the closing stock price on the participant's enrollment dates; therefore, 429 participants were withdrawn from their current offering period, and re-enrolled into a new twenty-four-month offering period beginning on June 1, 2006. Incremental compensation cost of approximately \$1,323,000 was added to our unrecognized compensation expense at June 1, 2006.

The following table summarizes the option activity under all stock option plans.

	<b>Number of Shares</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Term</b>	<b>Aggregate Intrinsic Value</b>
Outstanding at October 31, 2005	1,479,304	\$17.32		
Granted	217,000	\$17.90		
Exercised	(108,375)	\$10.32		
Forfeitures or expirations	(40,150)	\$19.54		
Outstanding at October 31, 2006	1,547,779	\$17.83		
Exercised	(90,091)	\$9.58		
Forfeitures or expirations	(47,964)	\$18.65		
Outstanding at October 31, 2007	1,409,724	\$18.33		
Exercised	(77,730)	\$10.91		
Forfeitures or expirations	(122,676)	\$25.78		
Outstanding at October 31, 2008	1,209,318	\$18.05	4.75	\$3,712,345
Vested or expected to vest at October 31, 2008	1,185,901	\$18.04	4.70	\$3,711,321
Exercisable at October 31, 2008	982,513	\$17.45	4.33	\$3,704,869

The aggregate intrinsic value in the table above represents the total pre-tax value (that is, the difference between our closing stock price on the last trading day of fiscal year 2008 and the exercise price for those options in the money, multiplied by the number of shares) that would have been received by the option holders had all option holders exercised their options on October 31, 2008. This amount changes based on the fair market value of our stock. Total intrinsic value of options exercised was approximately \$313,000, \$584,000, and \$971,000, for fiscal years 2008, 2007, and 2006, respectively.

As of October 31, 2008, approximately \$1,571,000 of total unrecognized compensation costs related to unvested stock options is expected to be recognized over a weighted average period of 1.96 years.

Net cash proceeds from the exercise of stock options were approximately \$848,000, \$863,000, and \$1,119,000 for fiscal years 2008, 2007, and 2006, respectively.

The following table summarizes our restricted stock grant activity.

<b>Nonvested Shares</b>	<b>Shares</b>	<b>Weighted Average Grant Date Fair Value Per Share</b>
Nonvested at October 31, 2006	61,875	\$19.58
Grants	118,813	\$17.64
Vested	(15,472)	\$19.58
Forfeitures	(1,950)	\$18.06
Nonvested at October 31, 2007	163,266	\$17.35
Grants	95,000	\$14.81
Vested	(69,753)	\$17.35
Forfeitures	(13,111)	\$17.55
Nonvested at October 31, 2008	175,402	\$16.11

The total fair value of restricted stock grants vested in fiscal years 2008 and 2007 was \$1,210,000 and \$303,000, respectively. Our unrecognized compensation cost related to nonvested (restricted) stock is approximately \$2,160,000, and is expected to be recognized over a weighted average period of 3.50 years.

We realized an income tax deficiency from stock options exercised and restricted stock vested of approximately \$247,000 during fiscal year 2008. We realized an income tax benefit from stock option exercises and restricted stock vested during fiscal years 2007 and 2006 of approximately \$68,000 and \$379,000, respectively. In accordance with SFAS 123R, we present excess tax benefits from the exercise of stock options and the vesting of restricted stock, if any, as financing cash flows rather than operating cash flows.

### **Recent Accounting Pronouncements**

In September 2006, the FASB issued SFAS 157, *Fair Value Measurement*. SFAS 157 defines fair value, establishes a framework for measuring fair value, and enhances disclosures about fair value measurements. FSP 157-2, *Effective Date of FASB Statement No. 157*, delays the effective date of SFAS 157 for one year for all non-financial assets and non-financial liabilities, except for those items that are recognized or disclosed at fair value on a recurring basis. The measurement and disclosure requirements of SFAS 157 related to financial assets and financial liabilities will be effective for the first quarter of our fiscal year beginning November 1, 2008. We believe that the adoption of SFAS 157 for financial assets and financial liabilities will not have a material impact on our financial position, results of operations or cash flows. We are evaluating the impact SFAS 157 will have on our financial statements when we apply it to non-financial assets and non-financial liabilities beginning in the first quarter of our fiscal year beginning November 1, 2009.

In February 2007, the FASB issued SFAS 159, *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS 159 provides companies with an option to report selected financial assets and liabilities at fair value. It also establishes presentation and disclosure requirements to facilitate comparisons between companies using different measurement attributes for similar types of assets and liabilities. The statement will be effective for our fiscal year beginning November 1, 2008. We believe that the adoption of SFAS 159 will not have a material impact on our financial position, results of operations, or cash flows.

In June 2007, the FASB ratified Emerging Issues Task Force (EITF) Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities* (EITF 07-3). EITF 07-3 requires non-refundable advance payments for goods, services to be used in future research, and development activities to be recorded as an asset, with the payments expensed when the research and development activities are performed. EITF 07-3 applies to new contractual arrangements we enter into in our fiscal year beginning November 1, 2008. We believe that adoption of EITF 07-3 will not have a material effect on our financial position, results of operations, or cash flows.

In December 2007, the FASB issued SFAS 141R, *Business Combinations*. SFAS 141R replaces SFAS 141. The statement retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting. It changes the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process

research and development at fair value, and requires the expensing of acquisition-related costs as incurred. The statement will apply prospectively to business combinations occurring in our fiscal year beginning November 1, 2009. We are evaluating the impact adopting SFAS 141R will have on our financial statements.

In March 2008, the FASB issued SFAS 161, *Disclosures about Derivative Instruments and Hedging Activities— an amendment of FASB Statement No. 133*. SFAS 161 requires enhanced disclosures about derivatives on a quarterly basis, including qualitative disclosures about objectives and strategies for using derivatives, and quantitative disclosures about the fair value of derivatives, as well as gains and losses on derivative instruments. It also requires disclosures about the volume of derivative activity and credit-risk-related contingent features in derivative agreements. SFAS 161 does not change the accounting treatment for derivative instruments, and therefore, the adoption will not have any impact on our financial position, results of operations, or cash flows. SFAS 161 is effective for the first quarter of our fiscal year beginning November 1, 2009.

In June 2008, the FASB issued FSP EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities*. FSP EITF 03-6-1 clarifies that share-based payment awards that entitle their holders of unvested awards to receive non-forfeitable dividends or dividend equivalents should be considered participating securities. We have some grants of restricted stock that contain non-forfeitable rights to dividends and will be considered participating securities once we adopt FSP EITF 03-6-1. As participating securities, we will be required to include these instruments in the calculation of earnings per share (EPS) using the "two-class method." The two-class method of computing EPS is an earnings allocation formula that determines EPS for each class of common stock and participating security according to dividends declared and participation rights in undistributed earnings. FSP EITF 03-6-1 is effective for the first quarter of our fiscal year beginning November 1, 2009. We are currently evaluating the potential impact, if any, the adoption of FSP EITF 03-6-1 could have on our calculation of EPS.

## Note 2: Customer Concentration

The following table identifies the source of our revenues for fiscal years 2008, 2007, and 2006 by customer type.

	FY08	FY07	FY06
Intelligence agencies	80%	78%	74%
Military	16%	20%	23%
Commercial	4%	2%	2%
Foreign	—	—	1%
	100%	100%	100%

a dash (—) designates less than 1% revenue concentration

Within the customer types, two intelligence agencies and one branch of the military represented a significant portion of revenues. The table below identifies the revenue concentration (as a percentage of total revenues) from each significant customer.

	FY08	FY07	FY06
First intelligence agency	25%	26%	24%
Second intelligence agency	50%	47%	46%
One branch of the military	12%	15%	17%
	87%	88%	87%

Revenues from the United States Government can also be categorized as direct purchases and subcontracts, where we are the supplier to another contractor. The following table distinguishes revenue (as a percentage of total revenues) between those two categories.

	<b>FY08</b>	<b>FY07</b>	<b>FY06</b>
Direct purchases	65%	69%	60%
Subcontracts	31%	29%	37%
	<u>96%</u>	<u>98%</u>	<u>97%</u>

### **Note 3: Inventory**

Inventories are stated at the lower of average cost or market and consisted of the following (in thousands).

	<b>October 31,</b>	
	<b>2008</b>	<b>2007</b>
Raw materials	\$799	\$904
Work in process	6,911	4,597
Finished goods	431	443
	<u>\$8,141</u>	<u>\$5,944</u>

Inventory activities during fiscal year 2008 included a write-down of approximately \$1,329,000 during fiscal year 2008 and disposals of obsolete products of approximately \$251,000. Inventory activities during fiscal year 2007 included a write-down of approximately \$415,000 and disposals of obsolete products of approximately \$187,000.

### **Note 4: Goodwill and Intangible Assets**

The goodwill and identifiable intangible assets are related to our July 2005 acquisition of Dynamics Technology, Inc. (DTI).

#### **Goodwill**

Under SFAS No. 142, *Goodwill and Other Intangible Assets*, goodwill is not subject to amortization. Rather, we evaluate goodwill for impairment at least annually or more frequently if events and changes in circumstances suggest that the carrying amount may not be recoverable. No impairment was recognized in fiscal year 2008.

## Intangible Assets

The tables below present information on our identifiable intangible assets that are subject to amortization (in thousands).

		October 31, 2008		
	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	3 years	\$1,720	\$(1,720)	\$—
Existing technology	5 years	340	(227)	113
Patent	18 years	60	(11)	49
Total		<u>\$2,120</u>	<u>\$(1,958)</u>	<u>\$162</u>

		October 31, 2007		
	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	3 years	\$1,720	\$(1,338)	\$382
Existing technology	5 years	340	(158)	182
Patent	18 years	60	(8)	52
Total		<u>\$2,120</u>	<u>\$(1,504)</u>	<u>\$616</u>

All of our acquired identifiable intangible assets are subject to amortization and have approximate original estimated useful lives as noted in the table above. Amortization expense associated with our intangible assets was approximately \$454,000, \$644,000, and \$745,000, during fiscal years 2008, 2007, and 2006, respectively.

As of October 31, 2008, the estimated future amortization expense for acquired identifiable intangible assets is as follows (in thousands).

### Fiscal Years

2009	71
2010	49
2011	3
2012–2023	39
Total	<u>\$162</u>

## Note 5: Borrowing Arrangements

### Revolving Line of Credit

At October 31, 2008, we had a revolving line of credit (the Line of Credit) under which Wells Fargo Bank (Wells Fargo), could advance funds to us, up to a maximum principal amount of \$3 million. The Line of Credit was renewed on February 21, 2008, and it will expire on March 1, 2009.

At October 31, 2008, we had three standby letters of credit under the Line of Credit, totaling approximately \$1,407,000. One letter of credit, related to our Sunnyvale, California, facilities lease, had a committed balance of approximately \$1,221,000 at October 31, 2007, and October 31, 2006. The second letter of credit was a requirement of our workers compensation insurance, and had a committed balance of approximately \$150,000 at October 31, 2007, and October 31, 2006. The third letter of credit, a requirement of one of our customers had a committed balance of \$36,000. We do not pay interest on the amounts associated with the standby letters of credit.

As a result of the committed but unused funds associated with the two letters of credit, the total amount under the Line of Credit available for borrowing was approximately \$1,593,000. No fees or interest were associated with

this unused portion. Borrowings under the Line of Credit bear interest at Wells Fargo's reference rate (4.0% at October 31, 2008) and interest on those borrowings are payable monthly. As security for its indebtedness under the Line of Credit, we have granted to Wells Fargo a security interest in our cash and marketable securities maintained with an affiliate of Wells Fargo.

### **Term Loan and Interest Rate Swap**

Effective July 1, 2005, and in connection with the acquisition of DTI, we entered into a term loan with Wells Fargo in the principal amount of \$10 million, plus interest, the proceeds of which were used for acquisition financing (the Term Loan).

The Term Loan bears interest at a rate per annum equal to 1.750% above the London Inter-Bank Offered Rate (LIBOR) (4.00% at October 31, 2008). The Term Loan is for a seven-year term ending on July 1, 2012. Payment terms of the loan agreement include monthly payments of principal and interest.

As security for our indebtedness under the Term Loan, we have granted to Wells Fargo a security interest in our accounts receivable, general intangibles, inventory, and equipment.

We are required to maintain certain financial covenants setting forth minimum ratios for quick ratio and fixed charge coverage and maximum ratios for total liabilities to tangible net worth. As of October 31, 2008, we were in compliance with these covenants.

The following table sets forth our scheduled debt maturities under the Term Loan (in thousands).

<b>Year</b>	<b>Debt Maturities</b>
2009	1,429
2010	1,429
2011	1,429
Thereafter	1,071
<b>Total</b>	<b>\$5,358</b>

We are exposed to market risk from changes in interest rates on the Term Loan, and manage this exposure through the use of an interest rate swap agreement with Wells Fargo. By locking in a fixed rate for the entire term of the loan, this strategy decreases the variability of earnings and cash flows resulting from interest rate fluctuations and lowers the overall borrowing costs should interest rates rise. The interest rate swap is designated as a cash flow hedge and is accounted for under FASB Statement 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133). No losses on the agreement due to counterparty credit issues are anticipated. Under this swap, we pay an interest rate of 4.33% over the seven-year term of the loan and receive an average floating rate of LIBOR on the notional amount of the loan. Thus, we exchanged a variable rate obligation for a fixed interest obligation, resulting in an effective interest rate of 6.08%.

The effective portion of the cash flow hedge is reported as other comprehensive income and reclassified into earnings in the same period during which the hedged transaction affects earnings. At October 31, 2008, the effective portion of the hedge was a deferred loss of approximately \$78,000, net of taxes. Over the next twelve months, we expect to reclassify approximately \$93,000 of the loss to interest expense as principle on the Term Loan is repaid and the related swap-instrument notional amount is reduced.

We assess effectiveness of the hedge instrument regularly. The ineffective portion of the gain or loss, if there were any, would impact earnings as it occurs. There was no ineffective portion of the outstanding swap as of October 31, 2008.

**Note 6: Commitments**

The following table sets forth our contractual obligations, excluding interest payments on our debt, as of October 31, 2008 (in thousands).

<b>Fiscal Year</b>	<b>Payments due by period</b>				
	<b>Total</b>	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>More than 5 years</b>
Operating lease obligations	\$36,052	\$7,550	\$14,100	\$7,678	\$6,724
Loan obligations – principal	5,357	1,429	2,857	1,071	—
Purchase obligations	5,228	5,228	—	—	—
Total	<u>\$46,637</u>	<u>\$14,207</u>	<u>\$16,957</u>	<u>\$8,749</u>	<u>\$6,724</u>

Our operating lease obligations consist of non-cancelable lease agreements for our facilities, which expire at various dates between fiscal years 2009 and 2016. Certain leases contain escalation clauses and requirements for the payment of property taxes, insurance, and maintenance expenses. During the first quarter of fiscal year 2008, approximately \$998,000 of the cost for our leasehold improvements was funded by the landlord of our new facility in Torrance, California. This was determined to be a lease incentive. This lease incentive reduces our rent expense and will be amortized on a straight-line basis over the remaining period of our operating lease that ends in fiscal year 2015. This reduction to rent expense is generally equal to the increased amortization expense of the associated leasehold improvements. Rent expense under operating leases was approximately \$7,617,000, \$7,208,000, and \$6,252,000 in fiscal years 2008, 2007, and 2006, respectively.

**Note 7: Income Taxes**

The provision for income taxes for the years ended October 31, 2008, 2007, and 2006 consists of the following (in thousands).

	<b>Year Ended October 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Federal</b>			
Current	\$6,132	\$4,589	\$3,617
Deferred	(1,579)	(374)	272
	<u>4,553</u>	<u>4,215</u>	<u>3,889</u>
<b>State</b>			
Current	1,200	994	930
Deferred	(222)	(34)	41
	<u>978</u>	<u>960</u>	<u>971</u>
<b>Total</b>	<u><b>\$5,531</b></u>	<u><b>\$5,175</b></u>	<u><b>\$4,860</b></u>

The provision for income taxes differs from the amount computed by applying the statutory federal income tax rate to income before provision for income taxes as follows (in thousands).

	<b>Year Ended October 31,</b>		
	<b>2008</b>	<b>2007</b>	<b>2006</b>
Computed expected tax provision	\$4,742	\$4,196	\$3,215
State income tax, net of federal benefit	722	626	481
Stock-based compensation	840	778	920
Research and development credit	(580)	—	—
Tax-exempt interest	(394)	(463)	(184)
Tax asset adjustment	(332)	—	—
Meals and entertainment	259	213	218
Tax liability adjustment	—	—	369
Other items	274	(175)	(159)
<b>Total</b>	<u><b>\$5,531</b></u>	<u><b>\$5,175</b></u>	<u><b>\$4,860</b></u>
Effective tax rate	40.82%	43.17%	52.90%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities are as follows (in thousands).

	October 31,	
	2008	2007
Deferred tax assets:		
Accrued expenses and reserves	\$5,310	\$3,012
Net operating loss carryforward	1,025	2,314
Stock-based compensation	1,908	1,603
Depreciation and amortization	2,438	1,352
Other items	655	339
Total deferred tax assets	11,336	8,620
Deferred tax liabilities:		
Accrued expenses and reserves	(572)	(704)
DTI – Intangibles	(65)	(248)
Other items	—	—
Total deferred tax liabilities	(637)	(952)
Total deferred tax assets/(liabilities)	\$10,699	\$7,668

Current deferred tax asset balances at October 31, 2008, and 2007 were approximately \$6,290,000 and \$2,647,000, respectively, and included in prepaids and other current assets in the accompanying balance sheets. Long-term deferred tax assets balances at October 31, 2008, and 2007 were approximately \$4,409,000 and \$5,021,000, respectively, and are included in long-term deferred tax assets in the accompanying balance sheets.

During the second quarter of fiscal year 2008, we filed an Application for Change in Accounting Method with the Internal Revenue Service (IRS) under the automatic-consent provisions. Based upon the change in method filed with the IRS, we re-measured our deferred tax asset balance related to the determination of tax basis depreciation on certain property and equipment assets as of October 31, 2006. This led to a tax benefit of approximately \$332,000.

Deferred tax assets includes a net operating loss (NOL) carryforward incorporated as a result of the DTI acquisition in fiscal year 2005 and accounted for in the purchase of DTI. The utilization of the NOL carryforward against our taxable income is limited each year and may be carried forward up to fiscal year 2025. The DTI NOL available as of October 31, 2008, is approximately \$2.9 million for both federal and Virginia purposes.

As of October 31, 2008, management has determined that our deferred tax assets are “more likely than not” to be realized in future periods and, therefore, we have not provided a valuation allowance on the deferred tax asset.

We adopted FASB Interpretation Number 48, *Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109* (FIN 48) effective November 1, 2007. FIN 48 describes a two-step approach to recognizing and measuring uncertain tax positions. The first step is to determine whether it is more likely than not that a tax position accounted for under SFAS 109 will be sustained upon examination. The second step is to measure and recognize the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. We determined that there were no unrecognized tax benefits to be recorded upon adoption of FIN 48.

During fiscal year 2008, we recorded total gross unrecognized tax benefits of approximately \$1,450,000, primarily due to uncertain tax positions related to our tax credits and tax treatment of certain temporary differences. If recognized, approximately \$215,000 would impact our effective tax rate. Interest and penalties related to unrecognized tax benefits are included within the provision for income taxes in our statement of operations. We recognized approximately \$252,000 of interest and penalties relating to unrecognized tax benefits as of October 31, 2008.

The fiscal year 2008 activity of our FIN 48 uncertain tax positions, including all federal and state jurisdictions is as follows (in thousands):

Balance, beginning of year	\$—
Additions for tax positions related to the current year	1,450
Additions for tax positions from the prior years	—
Reductions for tax positions from prior years	—
Statute of limitations expirations	—
Balance, end of year	<u>\$1,450</u>

#### **Note 8: Retirement Plan**

All employees who perform at least 1,000 hours of service per year are covered under our retirement plan (the Retirement Plan). The Retirement Plan is maintained by an outside administrator. Currently, company contributions to the Retirement Plan are based on qualified compensation up to a maximum of 6% of \$235,000 per employee, per annum at the rate of \$0.75 per \$1.00 contributed by the employee. This is a change from the Retirement Plan through fiscal year 2008, which was calculated at the rate of 4% of qualified compensation up to a maximum of \$230,000 per employee per annum. Contributions continue to be discretionary and we continue to accrue the accumulated contributions, which are payable biweekly, to the Retirement Plan's administrator. We have incurred approximately \$3,150,000, \$2,925,000, and \$2,916,000 in expense under the Retirement Plan for fiscal years 2008, 2007, and 2006, respectively.

#### **Note 9: Segment Reporting**

We have reviewed our business operations and determined that we operate in a single homogeneous business segment. We sell similar products and services with similar economic characteristics to similar classes of customers, primarily to the United States Government, its agencies, or prime contractors for the United States Government. The technologies and the operations of our divisions are highly integrated. Revenues and costs are reviewed monthly by management on an individual contract basis as a single business segment.

#### **Note 10: Contingencies**

**Product warranties.** Our products are warranted against defective workmanship and materials for a period of one year from the date of acceptance by the original purchaser. Warranty costs were approximately \$181,000, \$306,000, and \$279,000 for fiscal years 2008, 2007, and 2006, respectively.

**Guarantees.** From time to time, we enter into certain types of contracts that contingently require us to indemnify parties against third-party claims. These contracts primarily relate to 1) certain real estate leases under which we may be required to indemnify property owners for environmental and other liabilities, and other claims arising from our use of the applicable premises and 2) certain agreements with our officers, directors, and employees under which we may be required to indemnify such persons for liabilities arising out of their employment relationship. The terms of such obligations vary. Generally, a maximum obligation is not explicitly stated. Because the obligated amounts of these types of agreements often are not explicitly stated, the overall maximum amount of the obligations cannot be reasonably estimated. Historically, we have not been obligated to make significant payments for these obligations, and no liabilities have been recorded for these obligations on the balance sheet as of October 31, 2008, or 2007.

**Legal proceedings.** We are subject to litigation, from time to time, in the ordinary course of business including, but not limited to, allegations of wrongful termination or discrimination, or governmental agency investigations. As a government contractor, we may also be subject to investigations by the United States Government for alleged violations of procurement or other federal laws. Under present government procurement regulations, if judged in violation of procurement or other federal civil laws, we could be suspended or barred from eligibility for awards of new government contracts.

On March 11 and July 19, 2005, purported securities class action complaints were filed in the United States District Court, Northern District of California. The cases were considered as *In re Applied Signal Technology Inc. Securities Litigation*, Master File No. 4:05-cv-1027 (SBA). The amended consolidated complaint is brought on behalf of a putative class of persons who purchased our Company's securities during a class period of August 24, 2004, through February 22, 2005. The complaints name us, our former Chief Executive Officer, and our Chief

Financial Officer as defendants, and allege that false and misleading statements regarding us were issued during the class period. On February 8, 2006, the Court dismissed the case with prejudice and entered judgment in defendants' favor. Plaintiffs appealed the judgment of dismissal on March 23, 2006, and the appeal was heard on December 6, 2007; any future unfavorable outcome of the litigation could have an adverse impact on our business, financial condition, and results of operation. At this time, we cannot estimate the amount of possible loss or range of loss that might be incurred as a result of this proceeding.

On August 12, 2008, a purported shareholder derivative action was filed in the Superior Court, State of California. *Shoemaker v. Devine et al.*, No. 1:08-CV-119810. It is brought on purported behalf of the Company, against current and former members of the Board of Directors, our Chief Financial Officer, and our former Chief Executive Officer, asserting that these individuals breached their fiduciary duties, based on essentially the same allegations as the class action case. No damages are specified. On January 9, 2009, the Court sustained demurrers to the Complaint, with leave to amend.

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**Note 11: Change in Management**

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During the second quarter of fiscal year 2008, Mr. Gary L. Yancey, our former Chairman and Chief Executive Officer, resigned as an executive officer and as a member of the Board of Directors. His final date of employment with us was May 30, 2008. Upon Mr. Yancey's resignation, Mr. John P. Devine, a director since 1995, was named non-executive Chairman of the Board of Directors and Mr. William Van Vleet III, our Chief Operating Officer, was appointed as Acting Chief Executive Officer. In connection with his departure, on May 23, 2008, we entered into a Severance Agreement and General Release of Claims with Mr. Yancey, under which, we are providing to Mr. Yancey certain separation benefits. These benefits are payable to Mr. Yancey pursuant to his participation in the Company's Executive Retention and Severance Plan of August 19, 2004, and as a result of which, we are paying to Mr. Yancey in monthly installments an amount equal to 24 months of his base salary and 100% of his annual bonus. The bonus was determined as the aggregate amount that would be earned by him during fiscal year 2008 if all applicable performance goals were achieved. We will also continue health and other similar benefits until Mr. Yancey reaches age 65.

As a result, we recognized accrued severance of approximately \$1,180,000 during the second quarter of fiscal year 2008. In addition, we believe that severance expense is recoverable through our indirect rates, and therefore, we increased our indirect rate variance included in inventory by approximately \$1,180,000.

In addition, all outstanding but unvested options to purchase Company common stock and all unvested restricted stock awards held by Mr. Yancey vested in full as of May 30, 2008. We also extended the period of exercisability of any vested stock options held by Mr. Yancey to two years from the date of termination of employment or expiration of the individual option grant, whichever occurs first. We recognized stock-based compensation expense of approximately \$304,000 during the third quarter of fiscal year 2008, associated with the modifications to Mr. Yancey's equity awards.

On August 20, 2008, Mr. Van Vleet was appointed as President, Chief Executive Officer, and a Class I member of the Board of Directors.

## Item 9: Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

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None.

### Item 9A: Controls and Procedures

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**Conclusions regarding disclosure controls and procedures.** Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

**Management's report on internal control over financial reporting.** Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f). Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting by using the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework*. Based on our evaluation under the framework in *Internal Control—Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of October 31, 2008.

The effectiveness of our internal control over financial reporting as of October 31, 2008, has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report, which is included in "Part II, Item 8: Consolidated Financial Statements and Supplementary Data" of this annual report on Form 10-K.

**Changes in internal control over financial reporting.** There was no change in our internal control over financial reporting during the fourth quarter of fiscal year 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Limitations of the effectiveness of internal control.** A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the internal control system are met. Because of the inherent limitations of any internal control system, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Notwithstanding these limitations, our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. Our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are, in fact, effective at the "reasonable assurance" level.

### Item 9B: Other Information

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None.

## Part III

The information required by Part III is incorporated by reference from the information identified below contained in the Applied Signal Technology, Inc. Proxy Statement for the Annual Meeting of Shareholders to be held on March 18, 2009 (the Proxy Statement). The Proxy Statement is to be filed with the Securities and Exchange Commission pursuant to Regulation 14A of the Exchange Act, no later than 120 days after the end of the fiscal year covered by this annual report.

### **Item 10: Directors, Executive Officers, and Corporate Governance**

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The information required by this item concerning our Board of Directors, our audit committee and audit committee financial expert is incorporated by reference to the information in the section entitled "Information About our Directors" and "Corporate Governance" in the Proxy Statement. Information concerning our executive officers is incorporated by reference to the information in the section of our Proxy Statement entitled "Executive Compensation and Other Information—Information About the Executive Officers."

The information required by this item concerning executive officers is incorporated by reference to the section entitled "Executive Officers of the Registrant" in the Proxy Statement.

The information required by this item concerning compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is incorporated by reference to information in the section entitled "Security Ownership of Certain Holders – Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement.

The Board of Directors of Applied Signal Technology, Inc. has adopted a code of ethics that applies to our principal executive officers, principal financial officer, and controller, as well as all other employees. A copy of this code of ethics has been posted on our Internet website at [www.appsig.com](http://www.appsig.com). In addition, hard copies can be obtained free of charge through our investor relations department. Any amendments to, or waivers from, a provision of our code of ethics that applies to our principal executive officer, principal financial officer, controller, or persons performing similar functions and that relate to any element of the code of ethics enumerated in paragraph (b) of Item 406 of Regulation S-K shall be disclosed by posting such information on our website.

### **Item 11: Executive Compensation**

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The information required by this item is incorporated by reference to the sections in the Proxy Statement entitled "Director Compensation," "Executive Compensation and Other Matters," and "Corporate Governance—Compensation Committee Interlocks and Insider Participation."

### **Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

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The information required by Item 403 of Regulation S-K is incorporated by reference to the section entitled "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement.

The information required by Item 201(d) of Regulation S-K is incorporated by reference to the section entitled "Equity Compensation Plan Information" in the Proxy Statement.

### **Item 13: Certain Relationships and Related Transactions, and Director Independence**

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Not applicable.

### **Item 14: Principal Accountant Fees and Services**

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The information required by this item is herein incorporated by reference to the section entitled "Proposal No. 3, Ratification of Selection of Independent Auditors" in the Proxy Statement.

## Part IV

### **Item 15: Exhibits and Consolidated Financial Statement Schedules**

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(a) (1) and (2) The following consolidated financial statements of Applied Signal Technology, Inc. are filed as part of this report under Item 8:

- Balance Sheets – October 31, 2008, and 2007
- Statements of Operations – Years ended October 31, 2008, 2007, and 2006
- Statement of Shareholders' Equity – Years ended October 31, 2008, 2007, and 2006
- Statements of Cash Flows – Years ended October 31, 2008, 2007, and 2006
- Notes to Consolidated Financial Statements – October 31, 2008

All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

(b) Listing of Exhibits – See Exhibit Index on page 74 of this report on Form 10-K.

## Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, therewith duly authorized.

**Applied Signal Technology Inc.**  
(Registrant)

Dated January 12, 2009

/s/ William B. Van Vleet III  
William B. Van Vleet III, Director,  
President and Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints William B. Van Vleet and James E. Doyle, and each of them, his or her true and lawful attorneys-in-fact, each with full power of substitution, for him or her in any and all capacities, to sign any amendments to this report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Date	Title
<u>/s/ William B. Van Vleet III</u> William B. Van Vleet III	January 12, 2009	Director, President and Chief Executive Officer (Principal Executive Officer)
<u>/s/ James E. Doyle</u> James E. Doyle	January 12, 2009	Vice President of Finance and Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ Milton E. Cooper</u> Milton E. Cooper	January 12, 2009	Director
<u>/s/ John P. Devine</u> John P. Devine	January 12, 2009	Chairman of the Board
<u>/s/ David D. Elliman</u> David D. Elliman	January 12, 2009	Director
<u>/s/ Marie S. Minton</u> Marie S. Minton	January 12, 2009	Director
<u>/s/ Robert J. Richardson</u> Robert J. Richardson	January 12, 2009	Director
<u>/s/ Dr. John R. Treichler</u> John R. Treichler	January 12, 2009	Director

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**Annual Report on Form 10-K  
Item 15(b)**

**Exhibits  
Year Ended October 31, 2008**

Applied Signal Technology Inc.  
460 West California Avenue  
Sunnyvale, CA 94086

## AST Index to Exhibits

<b>Exhibit Number</b>	<b>Description of Document</b>
2.1 <sup>(19)</sup>	Agreement of Merger of Mercury Acquisition Corporation, a California Corporation, and Dynamics Technology, Inc., a California Corporation, dated July 1, 2005
3.1 <sup>(1)</sup>	Second Amended and Restated Articles of Incorporation
3.2 <sup>(1)</sup>	Amended and Restated Bylaws
4.1 <sup>(1)</sup>	Specimen Common Stock Certificate
10.1 <sup>(1)</sup>	Form of Indemnification Agreement for directors and officers*
10.3 <sup>(6)</sup>	1991 Stock Option Plan and forms of agreements thereunder*
10.4 <sup>(1)</sup>	1993 Employee Stock Purchase Plan
10.6 <sup>(1)</sup>	Summary Plan Description of 401(k) Retirement Plan*
10.7 <sup>(2)</sup>	Lease Agreement, dated August 21, 1985, with Lincoln Mathilda Associates, Ltd. and Patrician Associates, Inc., and amendments thereto
10.8 <sup>(3)</sup>	Lease Agreements, dated November 23, 1994, with Lincoln Property Company Management Services, Inc. for Buildings H and I
10.9 <sup>(4)</sup>	Lease Agreement, dated May 31, 1996, with Constellation Real Estate, Inc., for 135 National Business Parkway
10.10 <sup>(5)</sup>	Amendments to Lease Agreements, dated November 23, 1994, with Lincoln Property Company Management Services, Inc.
10.11 <sup>(9)</sup>	2000 Stock Option Plan and forms and agreements thereunder
10.16 <sup>(8)</sup>	Amendments to Lease Agreements, dated July 30, 2001, with Sunnyvale Business Park
10.17 <sup>(7)</sup>	2001 Stock Option Plan and forms of agreements thereunder*
10.18 <sup>(8)</sup>	Amendments to Lease Agreements, dated September 20, 2000, with Eden Roc Partnership
10.19 <sup>(8)</sup>	Amendments to Lease Agreements, dated April 19, 2001, with Sunnyvale Business Park
10.20 <sup>(10)</sup>	2001 Stock Option Plan (as amended through January 20, 2003)*
10.21 <sup>(10)</sup>	Line of Credit Agreement, dated January 27, 2003, with Wells Fargo Bank, National Association
10.22 <sup>(10)</sup>	Security Agreement, dated January 27, 2003, with Wells Fargo Bank
10.23 <sup>(12)</sup>	Second Amendment to Lease Agreement, dated December 31, 2003, with Constellation Real Estate, Inc.
10.24 <sup>(12)</sup>	Third Amendment to Lease Agreement, dated January 20, 2004, with Carr America Realty Corp.
10.25 <sup>(12)</sup>	Annual Incentive Plan*
10.26 <sup>(13)</sup>	Amendment to the Line of Credit Agreement, dated February 12, 2004, with Wells Fargo Bank, National Association
10.27 <sup>(13)</sup>	Security Agreement, dated February 12, 2004, with Wells Fargo Bank, National Association
10.28 <sup>(13)</sup>	Stock Incentive Plan*
10.29 <sup>(14)</sup>	Second Amendment to Lease Agreement, dated May 18, 2004, with Eden Roc Partnership
10.30 <sup>(14)</sup>	Executive Retention and Severance Plan*
10.31 <sup>(15)</sup>	Revised Notice of Option Grant Form for the 2000 Stock Option Plan*
10.32 <sup>(15)</sup>	Revised Notice of Option Grant Form for the 2001 Stock Option Plan*
10.33 <sup>(15)</sup>	Revised Notice of Grant Form for the 2004 Stock Incentive Plan*
10.34 <sup>(20)</sup>	Executed Interest Rate Master Agreement, dated June 2, 2005
10.36 <sup>(20)</sup>	Lease Agreement Between the Platt Corporation and Dynamics Technology, Inc. Dated April 4, 1984
10.37 <sup>(20)</sup>	First Amendment to Lease Agreement Between the Platt Corporation and Dynamics Technology, Inc., dated June 30, 1985

<b>Exhibit Number</b>	<b>Description of Document</b>
10.38 <sup>(20)</sup>	Second Amendment to Lease Agreement Between the Platt Corporation and Dynamics Technology, Inc., dated July 14, 1989
10.39 <sup>(20)</sup>	Third Amendment to Lease Agreement Between the DABP Associated and Dynamics Technology, Inc., dated October 29, 1990
10.40 <sup>(20)</sup>	Fourth Amendment to Lease Agreement Between the Del Amo Business Plaza and Dynamics Technology, Inc., dated September 2, 1992
10.41 <sup>(20)</sup>	Fifth Amendment to Lease Agreement Between the Del Amo Business Plaza Partners, L.P. and Dynamics Technology, Inc., dated September 15, 1997
10.42 <sup>(20)</sup>	Sixth Amendment to Lease Agreement Between the Realty Associates Fund V, L.P. and Dynamics Technology, Inc., dated May 30, 2002
10.43 <sup>(20)</sup>	Seventh Amendment to Lease Agreement Between the Realty Associates Fund V, L.P. and Dynamics Technology, Inc., dated August 29, 2003
10.44 <sup>(20)</sup>	Eighth Amendment to Lease Agreement Between the Realty Associates Fund V, L.P. and Dynamics Technology, Inc., dated October 29, 2004
10.45 <sup>(20)</sup>	Ninth Amendment to Lease Agreement Between the Realty Associates Fund V, L.P. and Dynamics Technology, Inc., dated April 27, 2005
10.46 <sup>(20)</sup>	Lease Agreement Between 1555 Wilson Boulevard Limited Partnership and Dynamics Technology, Inc., dated May 16, 2003
10.47 <sup>(20)</sup>	First Amendment to Lease Agreement Between 1555 Wilson Boulevard Limited Partnership and Dynamics Technology, Inc., dated June 4, 2004
10.48 <sup>(20)</sup>	Amendment to Executed Loan Agreement, dated June 8, 2005
10.49 <sup>(20)</sup>	Fourth Amendment to Lease Between Eden Roc Partnership and Applied Signal Technology, Inc., dated May 3, 2005
10.50 <sup>(16)</sup>	Second Amendment to Line of Credit Agreement, dated February 25, 2005, with Wells Fargo Bank, National Association
10.51 <sup>(17)</sup>	Lease Agreement, dated January 31, 2003, with Tom M. Lacey Family Limited Partnership.
10.52 <sup>(18)</sup>	Executed Loan Agreement, dated June 8, 2005
10.53 <sup>(21)</sup>	Second Amendment to Deed of Lease, dated August 31, 2005, with RREEF America Reit II Corp
10.54 <sup>(22)</sup>	Second Amendment to Line of Credit Agreement, dated March 1, 2006, with Wells Fargo Bank, National Association
10.55 <sup>(23)</sup>	First Amendment to Lease Termination and Mutual Release Agreement with NBP, 131-133-141, LLC
10.56 <sup>(23)</sup>	Second Amendment to Agreement of Lease with NBP306, LLC
10.57 <sup>(25)</sup>	Lease agreement with Hamilton Associates, LLC, dated December 15, 2006
10.58 <sup>(26)</sup>	Amendment to Line of Credit Agreement, dated March 1, 2007, with Wells Fargo Bank, National Association
10.59 <sup>(26)</sup>	Amendment to 1993 Employee Stock Purchase Plan, dated May 31, 2007
10.60 <sup>(27)</sup>	Second Amendment to Agreement of Lease with NBP306, LLC
10.61 <sup>(27)</sup>	Amendment to Line of Credit Agreement, dated February 21, 2008, with Wells Fargo Bank, National Association
10.62 <sup>(28)</sup>	Third Amendment to Lease Agreement Between 1555 Wilson Boulevard Limited Partnership and Applied Signal Technology, Inc., dated July 25, 2008
10.63 <sup>(29)</sup>	Severance Agreement and General Release of Claims between Applied Signal Technology, Inc. and Gary L. Yancey
10.64	Amendment to 1993 Employee Stock Purchase Plan, dated August 20, 2008
10.65	Amendment to Stock Incentive Plan, dated November 19, 2008*
10.66	Amendment to Executive Retention and Severance Plan, dated November 19, 2008*

Exhibit Number	Description of Document
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14.1 <sup>(11)</sup>	Code of Business Conduct and Ethics
21.1 <sup>(24)</sup>	Subsidiaries of the Registrant
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
24.	Power of Attorney (included on signature page)
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\* Management contract or compensatory plan, contract, or arrangement

- (1) Incorporated by reference to corresponding Exhibit filed as an Exhibit to Registrant's Registration Statement on Form S-1 filed January 28, 1993 (File No. 33-58168).
- (2) Incorporated by reference to Exhibit 10.10 filed with the Registrant's Registration Statement on Form S-1 filed January 28, 1993 (File No. 33-58168).
- (3) Incorporated by reference to Exhibit 10.11 filed with the Registrant's Form 10-K for fiscal year 1994 dated January 27, 1995.
- (4) Incorporated by reference to Exhibit 10.15 filed with the Registrant's Form 10-K for fiscal year 1996 dated January 29, 1997.
- (5) Incorporated by reference to Exhibit 10.16 filed with the Registrant's Form 10-K for fiscal year 1996 dated January 29, 1997.
- (6) Incorporated by reference to Exhibit 10.17 filed with the Registrant's Form 10-Q filed on June 16, 1997, for the quarter ended May 2, 1997.
- (7) Incorporated by reference to corresponding Exhibit filed with the Registrant's Definitive Proxy Statement for the 2001 Annual Meeting of Shareholders held on March 15, 2001, filed on February 5, 2001.
- (8) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-K/A No. 1 for fiscal year 2001 dated January 29, 2002.
- (9) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-K for fiscal year 2002 dated January 28, 2003.
- (10) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2003 dated March 14, 2003.
- (11) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-K for fiscal year 2003 dated January 27, 2004.
- (12) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2004 dated March 9, 2004.
- (13) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the second quarter of fiscal year 2004 dated June 9, 2004.
- (14) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the third quarter of fiscal year 2004 dated September 9, 2004.
- (15) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-K for fiscal year 2004 dated January 14, 2005.
- (16) Incorporated by reference to Exhibit 10.31 filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2005 dated March 8, 2005.
- (17) Incorporated by reference to Exhibit 10.32 filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2005 dated March 8, 2005.
- (18) Incorporated by reference to Exhibit 10.33 filed with the Registrant's Form 10-Q for the third quarter of fiscal year 2005 dated September 7, 2005.
- (19) Incorporated by reference to Exhibit 10.35 filed with the Registrant's Form 10-Q for the third quarter of fiscal year 2005 dated September 7, 2005.

- (20) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the third quarter of fiscal year 2005 dated September 7, 2005.
- (21) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-K for fiscal year 2005 dated January 17, 2006.
- (22) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2006 dated March 7, 2006.
- (23) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the second quarter of fiscal year 2006 dated June 1, 2006.
- (24) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-K for fiscal year 2006 dated January 29, 2007.
- (25) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2007 dated March 9, 2007.
- (26) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the second quarter of fiscal year 2007 dated June 11, 2007.
- (27) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the first quarter of fiscal year 2008 dated March 10, 2008.
- (28) Incorporated by reference to corresponding Exhibit filed with the Registrant's Form 10-Q for the third quarter of fiscal year 2008 dated September 9, 2008.
- (29) Incorporated by reference to Exhibit 10.61 filed with the Registrant's Form 8-K dated May 23, 2008.

**Applied Signal Technology, Inc.**  
**Exhibit 23.1**

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-150178, 333-143787, 333-115002, 333-104756, 333-108011, 333-68146, 333-68148, 333-52308, and 333-72212) pertaining to the 2004 Stock Incentive Plan, 1993 Employee Stock Purchase Plan, the 1991 Stock Option Plan, the 2000 Stock Option Plan, and the 2001 Stock Option Plan of Applied Signal Technology, Inc. of our reports dated January 8, 2009, with respect to the consolidated financial statements of Applied Signal Technology, Inc. and the effectiveness of internal control over financial reporting of Applied Signal Technology, Inc. included in the annual report (Form 10-K) for the year ended October 31, 2008.

/s/ Ernst & Young LLP

San Jose, California  
January 8, 2009

## Applied Signal Technology, Inc.

### Exhibit 31.1

I, William B. Van Vleet III, certify that:

1. I have reviewed this annual report on Form 10-K of Applied Signal Technology Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ William B. Van Vleet III

William B. Van Vleet III  
Chief Executive Officer

January 12, 2009

**Applied Signal Technology Inc.**  
**Exhibit 31.2**

I, James E. Doyle, certify that:

1. I have reviewed this annual report on Form 10-K of AST, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ James E. Doyle

James E. Doyle  
Chief Financial Officer

January 12, 2009

**Applied Signal Technology Inc.**  
**Exhibit 32.1**

Certification of Chief Executive Officer Pursuant to  
18 U.S.C. Section 1350,  
As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Applied Signal Technology Inc. (the Company) on Form 10-K for the year ended October 31, 2008, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, William B. Van Vleet III, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 906), that, to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ William B. Van Vleet III

William B. Van Vleet III  
Chief Executive Officer

January 12, 2009

**Applied Signal Technology Inc.**  
**Exhibit 32.2**

Certification of Chief Financial Officer Pursuant to  
18 U.S.C. Section 1350,  
As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of AST, Inc. (the Company) on Form 10-K for the year ended October 31, 2008, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, James E. Doyle, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 906), that, to the best of my knowledge:

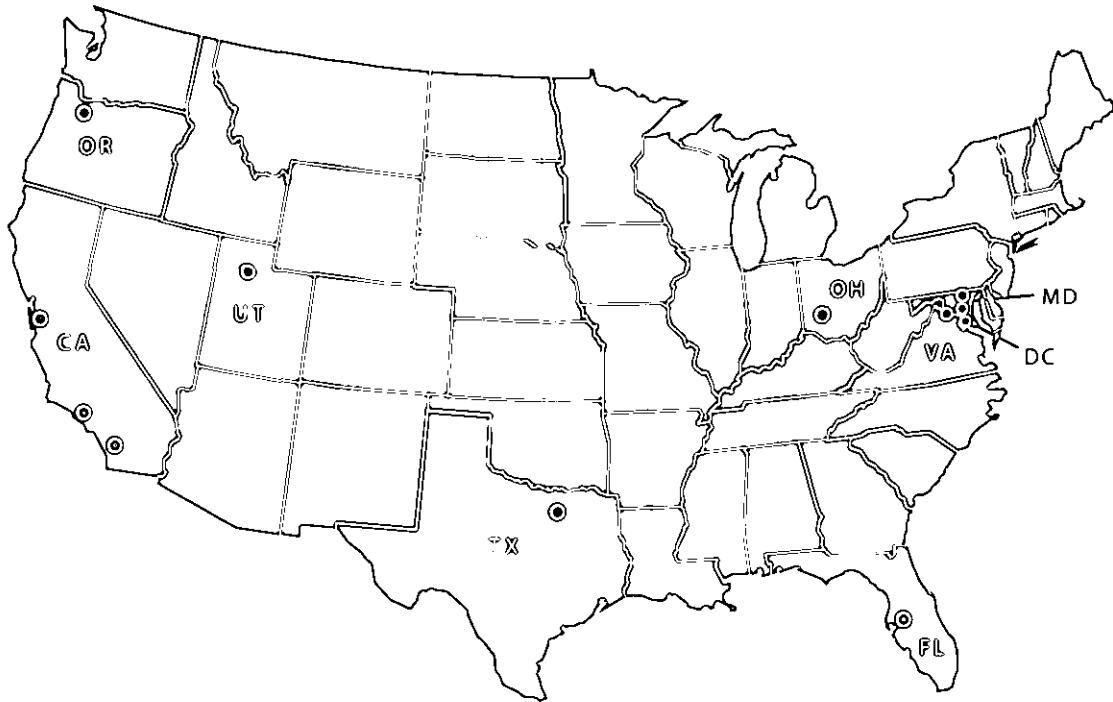
1. The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James E. Doyle

James E. Doyle  
Chief Financial Officer

January 12, 2009

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